TEN
THOUSAND
MILES
THROUGH
CANADA
JOSEPH
ADAMS

TEN THOUSAND MILES THROUGH CANADA JOSEPH ADAMS





EX LIBRIS UNIVERSITATIS ALBERTENSIS

Ralph B. Young (MBA, 1973) Western Canadian Collection

"To the future students and researchers who share an appreciation for our proud history and heritage" To Belly with my love Corime. Christman 1912

TEN THOUSAND MILES THROUGH CANADA

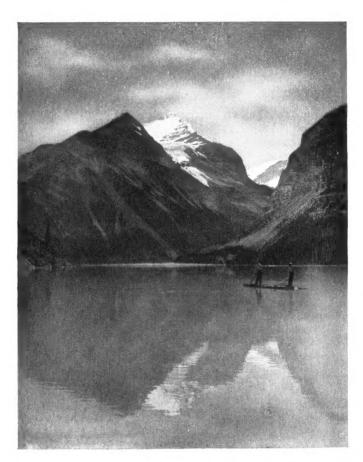


•

.

,

9 90 0



MOUNT ROESON AND LAKE HELENA

TEN THOUSAND MILES THROUGH CANADA

THE NATURAL RESOURCES, COMMERCIAL INDUSTRIES, FISH AND GAME, SPORTS AND PASTIMES OF THE GREAT DOMINION

JOSEPH ADAMS
"CORRIGEEN" OF "THE FIELD"

WITH FIFTY ILLUSTRATIONS AND A MAP

NEW YORK
FREDERICK A. STOKES COMPANY
PUBLISHERS

TO MY BEST HELPMATE IN THIS AND ALL MY WORK MY WIFE THIS BOOK IS AFFECTIONATELY DEDICATED



PREFACE

WHERE to go and what to see is one of the difficulties that face the visitor on arriving in Canada. It is the embarrassment of vastness and superabundance. A glance at the map shows that, despite the extensive inroads made by the railways, the Dominion is still a terra incognita and is likely to remain so to all except the occasional intrepid explorer. To use limited time to the best advantage—so as to get away from the beaten path—is scarcely possible single-handed.

It would not have been practicable for me, at least, to have travelled the distance that I did, and to have compiled the information contained in the following pages, without the knowledge and experience of others. In many respects such information was invaluable, and in all cases enhanced by the kindness which distinguishes Canadians in their bearings towards visitors, particularly those from the Mother Country.

To the following gentlemen I gratefully acknowledge my sense of obligation: Mr. C. C. James, Deputy Minister of Agriculture; Colonel Matthison, Treasurer; Mr. N. B. Colcock, Agent-General, and Mr. Arthur C. Pratt, M.P.P. of the Ontario Government.

The Heads of Government departments kindly placed at my disposal maps and returns on Mining, Agriculture and Natural History.

Mr. H. R. Charlton, Mr. G. T. Bell, Mr. W. T. Robson, of Montreal; and Mr. R. L. Thompson, Mr. J. D. Macdonald and Mr. Arthur Hawke, of Toronto, afforded me specialist information on rivers and lakes, which, as an angler, I found most valuable.

Whilst Canada is unique in the magnificent photographic subjects it offers, the climate itself during the bright, hot summer months presents serious difficulties in the way of obtaining first-class pictures. One is limited to the early morning or evening to get good results. There is little twilight. and with rapid travelling it is not easy personally to procure sufficient representative views. greatly indebted for a large proportion of the illustrations and the preparation of the sketch-map in this work, to the kindness and courtesy of Mr. J. M. Gibbon of the Canadian Pacific Railway, Mr. Fred C. Salter of the Grand Trunk System, and Mr. W. Haydon of the Canadian Northern Railway, also to Mr. Byron Harmon of Banff, B.C. Without such hearty co-operation it would have been impossible to have included in the work the variety of illustrations it contains.

The natural history of coarse and game fish in Canada needs revising. I am of opinion that it

would be possible to reduce the classification of trout and salmon to far fewer species, but we must take things as we find them, and in the treatment of the subject I acknowledge my indebtedness to Mr. Star Jordan's valuable work on "Food and Game Fish." Also Mr. E. Thompson Seton's recent work on "Life Histories of Northern Animals," which I have compared with Indian information and my own knowledge of big game. In referring to an older and not less valuable work, "The Big Game of North America," published by Messrs. Sampson, Low, Marston & Co., I have found there is little change of view on this subject.

I have consulted Francis Parkman's comprehensive work on the Jesuits and North American Indians, and Sir J. G. Bourinot for Canadian general history.

J. A.

CONTENTS

Preface	page Vii
CHAPTER I	
Departure—LicutGen. Sir R. S. S. Baden Powell—Boy Scouts —The effect of a breeze—The trek wagon—Lady Suffragists —Bride-elect passengers—Remedy for breaking windows— The concert, how not to do it—The ice region—Marconi cablegram of Crippen's arrest—Straits of Belle Isle— Demons' Islands—The hapless Marguerite—Early pioneers —Champlain and Brébœuf—French colonization—King Frost—The St. Lawrence river—Hardships of Champlain—	
The touch of spring	I
CHAPTER II	
Quebec—Strategic position—Historic associations—Wolfe and Montcalm—Church of Nôtre Dame des Victoires—Site of Champlain's Fort—The Hôtel Dieu—Landing of early Jesuit missionaries—Relics of Brébœuf and Lalemant—Falls of Montmorency—Where Wolfe failed—Kent House—Historical outline—Parliament—Denominational schools—Effects of confederation—Montreal—The situation—The Hochelaga of Cartier—Montreal of to-day—Institutions and schools—St. Anne de Bellevue—Macdonald College—Lachine rapids—Champlain's exploration of the Ottawa—Amongst the Indians—Defeats and conquests	15
CHAPTER III	
Ottawa Government and Toronto—Industries—Institutions and factories — Adoption of English customs — Aggressive	

	٠	è
T	1	1

	PAGE
commercialism-Fruit growing-Through Norfolk County	
-Comparison with English fruit growing-Fruit preserving	
-Cost of labour-Bees-Poultry-Cheese-Bass fishing on	
Lake Erie-Rods and tackle-Niagara Falls-Gifts to	
Manitou-A great national utility-The mines of Ontario	
-Official returns - Sudbury, Cobalt, and Porcupine -	
Encouragement and warnings	28

CHAPTER IV

A۱۶	onquin National Park—Simcoe Lake—Barrie—Muskoka Lake
	-The Great Forest-Primeval conditions-Cache Lake-
	The hand of the spoiler-Conservators' report-Animal life
	-Trout fishing on Cranberry Lake-Scientific and un-
	scientific angling-Camping out-The Indian canoe-The
	Corkscrew River-My guide-Beavers' dams-The beaver's
	house—Co-operative labour—The romance of a monogamist
	-Canoe Lake-The Thunderstorm-Fishing lakes-Down
	the Muskoka River-Battling with the rapids-Whisky Falls
	-Deer and their habits-The Dolly Varden trout-Wet and
	dry fly fishing-Fresh fish for supper-Lumbering, and injury
	to trout streams-Befriending drowned-out campers-The
	howling of wolves-The rush through the forest-A wary
	quarry.

CHAPTER V

En route for French River—Pickerel Landing—The house on the rock—Primitive simplicity—The fate of the skunk—The Ojibwa Indian guide—Reversion to original type—Whisky and deterioration—French River—Recollections of Champlain—Trolling for bass and pike—A master of the knife—A fight with the "tiger of the river"—Gaff versus rifle—The indefatigable guide—The might have been—In camp—The note of the whipoorwill—"The fretful porcupine"

7

50

PAGE

CONTENTS

CH.	A PT	rer.	VI

Lake of bays-Fairy Lake-A honeymoon island-A smothered
waterway-Mary Lake-The searchlight-Wawa Hotel-
The "Joe" pleasure tug-Memories of Bigwin-A triplet of
graces-Savage Den and its "chief"-Auld lang syne-
Hollow Lake-Trout-fishing on Raven Lake-North Bay
and Temagami; Facilities for colonization, The Forest
Reserve, Angling rivers and lakes, The Land of Hiawatha.

90

CHAPTER VII

"Westward Ho"—Orangeville—Owen Sound—Through the Great Lakes—Associations of Lake Huron—Brébœuf's mission to the Indians—Feast of the dead—The wigwam life—Indian superstitions—Folklore—Diabolical tortures—Honour—Indian creeds—Loyola and his followers—Heroism of the Jesuits—Painted devils—Joques—Massacre of Brébœuf and Lalemant—Failure of Jesuit mission—The passing of the Iroquois—Lake Superior—Picturesque rapids—The largest lock in the world—Saulte Ste. Marie—Lake trout—Fishing resorts—An inland sea—The Rideau River—Nipigon and its trout—Patrol stations—Traffic on Lake Superior—Thunder Bay—Port Arthur and Fort William—Change of the clock—En route for Winnipeg—The opening page of the book of the prairies

103

CHAPTER VIII

The province of Manitoba—The realization of "Sea Dreams"—
Civic and agricultural growth—Winnipeg—Railway enterprise—The Canadian Pacific and Grand Trunk Railways—
System of Government—Schools—Public Park—Prices of
produce—"Ralph Connor"—The Canadian Northern Railway—Winnipeg to Edmonton—The chance of a millionaireship—Edmonton—The lady and the "gentleman" bus
conductor—Colleges and schools—Churches and drinking
saloons—Vegetable products—Edmonton to Calgary—
Flourishing agriculture

122

CHAPTER IX

	PAGI
Through prairies to Rockies-Portage le Prairie-Regina-	
Government offices and mounted police—Climate—Growth	
of railways-Saskatchewan Province-Census returns of	
industries - Moose Jaw-Alberta Province - Uncultivated	
millions-Picturesque forests and streams-The home of the	
buffalo-Four great rivers-Misconceptions of climate-The	
heat line—The "chinook"—Wild grasses—Cattle rearing—	
Cereal productions — Exhibition medal awards — Wheat	
returns—Clover—Sheep and wolves—Horse breeding—	
Champions at the World's Fair—Calgary—Democratic	
principles—Ranching and lumbering—The Bow and Kana-	
naskas Rivers	124

CHAPTER X

Prairie conflagrations—Outposts of the Rockies—Drab flats and purple crags—In the glacier track—Geological action—The Three Sisters—Between Canmore and Bankhead—The National Park—Surviving specimens of big game—Rundle Mountains—Minnewauka Lakes—Laggan—Lakes in the Clouds—The glacier region and its rivers—Hector monument—The Kicking Horse River—A great engineering feat—Douglas pines—Victims of forest fires—The Selkirks—The track of the avalanche—The Eagle River—The Fraser and Thompson—The Pacffic—The flora of prairie and mountains—Vancouver—Shipping and trading

CHAPTER XI

British Columbia—Mineral products—Dr. Dawson's report—
Development—Gold—Vicissitudes of mining—Copper and
zinc—Percentages—The "Lucky Jim"—Marble quarries—
Portland cement—Petroleum—Demand for a government—
Constitution—The Kootenay district—Lumbering—Yale
district—Railway extension—Lillooet—The climate—
Through the Yellow Head Pass—The Athabasca River—Brule

CO	N	PE:	NΊ	rs
----	---	-----	----	----

XV

PAGE Lake-Roche Miette and Roche Suette-Sulphur springs-Pyramid Mountains-Geikie-Moose River-Selwyn and Rainbow Mountains-The premier of the Rockies-Lake Helena-A steamboat on the rapids-The Naas Valley-The Skeena Valley-Vancouver Island-Comox district-Minerals and timber-Sawmills-Homesteads-Land Clearing and Irrigation Companies-Gold medal award-Fruit . 156

CHAPTER XII

Growth of trade-Official returns-Great Britain-Canada-United States-France and Germany-Imports and exports -Attractions for settlers-Capital brought into the Dominion -Increased cost of living-Government inquiry-Causes of the increase-" Plain living and high thinking"-Emigration Amendment Bill-Protests and criticisms-Lord Crewe's protest-Modifications of the Bill-Tariff and Reciprocity-Petition to the Government-The statement of the case by experts-Sir Wilfrid Laurier's reply-A counterblast-The general election . . . 172

CHAPTER XIII

Women's organizations-Christian Temperance Union-National Council of Women-A suffragette echo of Westminster-The recognition of women in the State-Clubs and societies -Socialism in the Dominion-"Seizing the reins of power" -The unfurling of the red flag-The safety valve of democracy . . . 189

CHAPTER XIV

Game fish-Variableness of the season-Primitive methods of angling-Salmon species-A thousand miles' swim-The cohoe-The sockeye-The humpback-The dog salmon-Trout species - The common trout - The steel-head-The Kamloops-The Great Lake trout-The Dolly Varden-

Brook trout—Distribution of salmon and trout—Angling reaches—Death of salmon after spawning—Theories—Fly and spoon-bait—Fishing rods—The course of the Fraser River—The Coquihalla and Hope Rivers—Angling on the Harrison River—My Indian guide—Scepticism and faith—A fight with a twenty-five pounder—The Harrison described—A second captive—Invoking Adjidaumo—His blessing on a twenty-six pounder—A visit to the Harrison Rapids—The cohoe run	197
CHAPTER XV	
Going West—Stave River—Minnow and spoon-bait—Coquitlam River—Vancouver angling—Scarcity of gillies—Off to the Narrows—Angling in the Pacific—Playing a salmon in a swift tide—Dame Fortune's amends—Off Vancouver Island—The Campbell River—The Cowitchen River—Advocacy of the fly—The best months—Trout fishing—The fly season—The fry season—A visit to Seymour Creek—A lonely forest—Track of the grizzly—In search of a trail—The Vedder River—A charming retreat—Wading for Dolly Vardens—Capture with the fly—A magic evening scene—The North Thompson River—The Columbia River—Kootenay and Okanagan—The course of the Columbia River—Great trout lakes	219
CHAPTER XVI	
Salmon and trout supply—The falling off—Government Fisheries Commission report—Proposed remedies—Minority report— The United States difficulty—Mr. Babcock's comments— Opinions of Steveston fishermen—Deadly salmon traps in Puget Sound—The lesson of British Isles fisheries— Creation of hatcheries—Future guardianship of fisheries— Mr. Willmot's report—Mr. Kelly Evans on revenue from fisheries—Wholesale destruction of whitefish—Depleted lakes—Suggested remedies—Angling as a recreation— Playing the game	234

CHAPTER XVII

Wild fowl—Duck and their habitat—French River—Temagami
—Outskirts of Algonquin Park—Manitoba, Saskatchewan,
and Alberta provinces—Wood duck—Pintail—Canvas-back,
etc.—Game—The Canadian rough grouse—The sooty,
Oregon, and grey-ruffed species—Ptarmigan classification—
Prairie chicken—Black-game and capercailzie—Pheasants,
partridges, quail—Game characteristics—High mountain and
wood species—The sporting quail

CHAPTER XVIII

Big game-Guides-Natural History-Wapiti-When Greek meets Greek-Defence of young-The mule deer-Plentiful west of Rockies-The old doe leader-Destruction of species -The Virginian deer-Its keen sight-Giving the alarm-Simulation of the young—The moose—Feeding on mountain ranges-Antlers' growth-Calling the moose-Its mettle-Yarding-Dispersion-The Caribou-Speed and swimming powers - Telegraphic communications and pungency -Dispersion - The black bear - Habits - Mating season -Insect food-The captain's midnight encounter-Stealing the beans-The grizzly bear-Widely distributed-Hibernation-Rolling like a ball-Trapping-Charged with manslaughter-The buffalo-The penned monarch-Causes of extermination-Illegal and legalized trade-The big-horn sheep-The sentinel-Falling on its horns-The mountain goat-Dispersion-The value of the fleece-Wariness and aloofness-Guides-Outfit-Big game excursions.

CHAPTER XIX

Reflections—Conditions of success—Social environment—The lonely life—Minimizing temptation—The liquor laws—Local option—Native sports—The domination of commerce

252

xviii THROUGH CANADA

—Belated literature and art—Canadian writers—Historians, poets, and novelists—Religious zeal—Commercial expansion Insular sentiment—Cosmopolitan practice—Transatlantic steam service—Returning through the St. Lawrence—The closed and opened book—Changed times and manners—Reading the riddle—Canadian Boat Song—Symbols in the									sion atic The	PAGE	
western sl								•			280
Appendix.						•		•	•		289
INDEX .											200

LIST OF ILLUSTRATIONS

MOUNT ROBSON AND LAKE HELEN.	Α.			Frontispiece	
					FACING PAGE
NORTH AMERICAN INDIANS-A CH	IEF'S C	OAT O	F ARMS		24
AN ONTARIO GOVERNMENT ORCHA	RD .				32
NIAGARA FALLS					40
THE ERIE RIVER-NIAGARA RAPID	s .		•		42
TROUT FISHING-LANDING A THR	er-pou	NDER	IN ALGO	NQUIN	ľ
PARK		•			58
MUSKOKA RIVER-MARK ASCENDI	NG WH	ISKEY	FALL R	APIDS	66
ANGLING ON THE FRENCH RIVER-	-ELLIC	K, MY	OJIBWA	GUIDE	80
BLACK BASS FISHING			•		84
CAMPING BY THE LAKE .					90
BOATING ON MUSKOKA LAKE			•		92
GEORGIAN BAY BLACK BASS .					100
KAKABEKA FALLS-THE SOURCE O	F PORT	ARTE	IUR ANI	FORT	•
WILLIAM ELECTRIC POWER .					104
A SHUSWAP WIGWAM AT TÊTE JA	UNE CA	CHE	•		106
PORT ARTHUR, COAL LOADING		•			114
MISSANABIE RIVER-FISHING FOR	SPECKL	ED TR	OUT		116
FORT WILLIAM-THE MISSION RIV	ER GRA	IN EL	EVATOR	s.	118
MOKOMAN RAPIDS			•		I 20
SPANNING THE SASKATCHEWAN RIV	er—pf	INCE	LBERT	BRIDGE	122
HARVEST. MANITOBA					124
A HEAVY CROP. MANITOBA .			•		126
DEEP PLOUGHING WITH OXEN TEA	AMS, SA	SKATC	HEWAN		128
RAILWAY AND TRAFFIC BRIDGE, S	ASKATO	CHEWA	N .		130
					-

THROUGH CANADA

XX

						FACING PAGI		
A COAL MINE AT EDMONTON								
THE SWAN RIVER							134	
DISKING, ON THE EDGE OF THE	PRAI	RIE					130	
BREAKING UP THE SOIL, ALBERT	A						140	
THE HARVEST, ALBERTA .							143	
THE "GAP"							144	
CANADIAN ROCKIES							146	
THE ROCKY MOUNTAINS-MOUNT	STEP	HEN,	NEAR	FIEL	D		148	
THE GREAT GLACIER							150	
VICTORIA DOCKS, VANCOUVER							152	
A PERILOUS CLIMB ON MOUNT HO	OBBLE						154	
A NELSON APPLE TREE .							160	
MOUNT GEIKIE							162	
THE TÊTE JAUNE CACHE .							164	
MOUNT ROBSON							166	
THE "DIAMOND" HITCH FOR A							16	
MOOSE RIVER FALLS							170	
CANADIAN LOYALTY ON VICTORIA							-,	
ALGONQUIN PARK							188	
FRASER CAÑON—CARIBOO JOE TU							204	
FRASER CASON—HELL'S GATE							206	
A FISHING FLEET, VANCOUVER H							220	
FISHING AT VICTORIA CREEK							226	
A MOUNTAIN CAÑON WHERE TRO							230	
FRASER RIVER FISHING .							236	
ROCKY MOUNTAIN BIG GAME—A						•	274	
IN THE HEART OF THE ROCKIES							278	
A GRAND WATER PÊTE .						•		
MAP SHOWING AUTHOR'S ROUTE					•		288	
Will Direction of Month	•		•	•		•		

TEN THOUSAND MILES THROUGH CANADA

CHAPTER I

Departure—Lieut.-Gen. Sir R. S. S. Baden Powell—Boy Scouts—The effect of a breeze—The trek wagon—Lady Suffragists—Bride-elect passengers—Remedy for breaking windows—The concert, how not to do it—The ice region—Marconi cablegram of Crippen's arrest—Straits of Belle Isle—Demons' Islands—The hapless Marguerite—Early pioneers—Champlain and Bréboeuf—French colonization—King Frost—The St. Lawrence River—Hardships of Champlain—The touch of spring.

THE great ocean liner slowly steamed down the Mersey. The bustle and excitement of embarkation calmed down and gave place to other emotions. The little knot of boy scouts that surrounded Lieut.-Gen. Sir R. S. S. Baden Powell had roared themselves hoarse in answer to their comrades' send-off from shore. They had watched the fluttering hand flags that beat out in signals their companions' adieu, until distance made them undecipherable. The glamour of the Canadian trip, the

В

topic by day, the dream by night, had faded out of mind for the moment, and a far-away look of yearning sobered the earnest young faces.

The feeling of detachment became general as the wharf rapidly receded, and the faces that comprised some heart asset were blurred into unrecognition in the amorphous crowd. Soon a low-lying smudge on the distant horizon marked all that was left of fatherland; another hour wiped it out, and the great circle of desolation was complete.

The list of passengers on board the "Empress of Ireland," was a long one. Scarcely a seat was unoccupied at the first dinner in the large saloon. The evening was fine, and the motion of the ship was unfelt. In the night a breeze sprang up, and the morning tables were depleted. The eleven ladies at my table were reduced to two, one survivor wore the badge of the Women's Suffrage Order. There were only two on board, who openly declared themselves at least, in sympathy with the Suffragist movement. One of them breakfasted under apparent physical discomfort and was absent from the next meal. The Spartan endurance of her companion covered the entire journey; an endurance by no means given to all the members of the sex that enjoyed the privileges for which she was an enthusiastic aspirant.

In the course of the day, the boy scouts played leap-frog, and practised drill. They were the successful fifteen out of over three thousand who competed

for the honour of the free Canadian trip. The examination was open to all boy scouts in the British Isles, and two Irish lads were amongst the winners. the rest. English and Scotch were in about equal proportion. Their skill in putting together and taking to pieces a patent trek wagon was admirable. This ingenious contrivance was a multum in parvo, designed for sundry uses. In its entirety it comprised a road wagon drawn by ropes; in pieces it resolved itself into a sleeping tent, a water tank, two ladders and a boat. The boys were divided into companies which vied with each other in smartly manipulating the patent. Alas! there was an interval of some days between the first and second practice. Half the lads were hors de combat; and some of them had to be carried on deck and stretched on mattresses to recuperate after the exhausting effects of mal de mer.

Towards the end of the journey, they took part in a gymkhana of which the Chief Scout was an interested spectator.

The Boy Scout movement is designed to develop manly and humane qualities. During the day each lad took his turn in keeping guard over real or imaginary baggage. The duty seemed to carry with it a general surveillance of the passengers. On one occasion a youth, essaying to climb the shrouds, fell heavily on the deck. The guard in a moment left his post, to apply first aid, a knowledge of which is a

recognized part of the scout curriculum. A system that embodies, as it does, the practice of some daily act of kindness is not without promise. I have known it to take the form of carrying a washerwoman's basket of laundry through a public park.

The organization is spreading with phenomenal rapidity, and already numbers 250,000 members. That Canadian voyage was but the first of a series. South Africa, Australia and New Zealand are to be visited in turn.

Lieut.-Gen. Sir R. S. S. Baden Powell, who retired last May from active military service, is devoting all his time to the development of the movement. It was interesting to learn the Chief Scout's views on the subject. They were in consonance with the honourable undertaking subscribed by every boy that joins:

(1) to be loyal to God and the King; (2) to help others at all times; (3) to obey the Scout law.

The General's statement to the Canadian Press was as follows: "I intend to consecrate myself to this cause which is getting beyond all bounds in its importance. One point I wish you to emphasize to your readers is that the practical side of the movement, allied to the moral, is supreme. Of course I do not object to our boys entering the Army, but I wish to teach them, above all things, to use intelligently the faculties which their Creator has given to them. If I succeed in enthusing Canada somewhat, my work will not have been done in vain. In

England it has the approval of King and country, and why not here?"

The movement has already taken root in Canada, the Governor-General being the Chief Scout, Lieut.-Col. A. P. Sherward, C.M.G., M.V.O. of Ottawa, Dominion Commissioner, and Capt. R. T. Birdwhistle, Dominion Secretary.

Amongst the passengers there were fourteen Most of their fiancés had been in brides-elect. Canada a comparatively short time, but had done so well that they were in a position to marry. of the lady passengers, who was crossing to attend her sister's wedding, took a special interest in this romantic section of the community, and espoused as her particular mission the discovery of all the prospective brides. The amount of sea-sickness amongst them. and the missioner's sympathy and tact, made the task comparatively easy. She would proudly march on deck, a pale-faced girl on one arm, a rug on the other, and with a look of eloquent significance. We called her the "bride-elect scout." She was one of the two Suffragists, and if the gift of the franchise to women depended on the gentlemen on board the "Empress of Ireland," the Prime Minister's windows would be safe in the future.

As the community in general crept back into life and revived in spirits, a concert was proposed by some of the obtrusively musical section of the passengers. The result supplied an admirable example of the "Art of how not to do it." The selfconstituted impresario went about soliciting the assistance of all and sundry in getting up "a little concert." He forestalled objections by asserting that he was convinced you could do something, and his friend by his side would be delighted to take down your name. "What, can't sing-then you can play: no? Well, let it be a recitation; put down a recitation, Mr. So-and-so." For the greater part of the day one overheard in various quarters of the ship, "We are getting up a little concert . . . you can do something. What, can't sing I" etc. At length the suggestion was made that some of the passengers ought to be left for the purpose of audience, as the list of performers had assumed prodigious proportions. The wisdom of this advice in due course bore fruit, whereupon the impresario took immediate steps to rectify the matter. The next day he went about asking persons who had been pressed into service if they minded their names being dropped. programme was too long," etc., etc. Most of the passengers willingly acquiesced, but one lady resolutely declined to render any assistance in the proposed act of self-effacement. "Certainly, I object. Why should I be dropped out? You asked me to sing: I did not offer my services." The force of the argument was so irresistible that even the impresario saw it. The item consisted of a ballad of some twenty-five verses, unaccompanied. It is on record

that at verse fifteen one polite gentleman and a highly delighted boy comprised the house. A more embellished account explained that they were the only two passengers who had not been asked to "do something." This, however, is apocryphal. The amount of the collection on the behalf of the widows and orphans of deceased mariners is not chronicled.

A change took place in the temperature as we approached the coast of Labrador, requisitioning extra wraps and overcoats. When the sun went down, a breath of Arctic cold whistled through the shrouds, which made our teeth chatter. Far off on the horizon, where an hour before the sun had sunk, a light still lingered. It was the field ice that for miles glistened along the coast. This was the explanation of the sudden change. We were in the ice region. Then a blinding mist wiped out all objects half a mile ahead, a common experience in that region. It is said to be due to the contact of the Gulf Stream with the sea in that latitude; the the hot and cold currents coming together cause the The foghorn rumbled out its melancholy note at definite intervals. Another steamer answered in the distance, and our boat immediately stopped. This is the rule of the road, and an important Meanwhile, the Marconi had been flashprovision. ing its current out into the night and made its circle with our near neighbour, a German passenger boat. This modern application of telegraphy has been

instrumental in minimizing collisions at sea to almost a vanishing quantity. The only danger now comes from a sailing-ship or the comparatively few steamers not fitted with the apparatus. The Marconi has also inaugurated on board ship the daily newspaper which publishes all the salient doings on land and sea. We were in possession of the news that Crippen had been arrested at Rimouski before it was known in London; the state of the markets, and the result of the principal cricket matches at Lord's and the Oval.

The fourth day we were in the Straits of Belle Isle. The island from which it takes its name is supposed to be one of the two Isles of Demons, the other being Ouirpon, a little further west, off the northern coast of Newfoundland. It is now as it was in the sixteenth century, wild and desolate, with nothing to break the silence but the cry of the seafowl, mingled with the shock of waves that break against the rugged coast. The well-known fishery was established at that early date, and French, English, Spanish, and Portuguese vied with each other for the treasures of the deep off the Newfoundland banks. The imagination of these early pioneers of commerce was the mint in which were coined the remarkable stories which are woven into the history of Demons' Islands. Old maps depict the occupants as devils rampant, fully equipped with tails and horns. The dark forest that stretched along the

shores was infested, and the clamour of infernal orgies carried on in the woods could be heard far out at sea. Fiends shrieked amongst the riggings of the ship, as if to warn the sailors of the fate that awaited them should they dare to approach the haunted islands.

It is difficult to disentangle history from romance in the story of the damsel Marguerite, who was cast adrift on one of these islands. She was the niece of Sieur de Roberval, a noble of Picardy, who fitted out an expedition to the Far West in 1542. Her amour with a gentleman on board, who joined the adventure on her account, so enraged her uncle that he stopped the ship and dispatched her to the island, attended by an old Norman nurse. As the ship set sail, her lover jumped overboard, braved the dangers of the sea, and reached her. After two and a half years, a fishing craft, attracted by the smoke rising from the fateful island, landed and rescued Marguerite. The story that is said to have fallen from her own lips is contained in an ancient manuscript, bearing the date 1586, after which the islands were known as "Les Îles de la Demoiselle." It is a singular narrative, containing graphic pictures of the demons raging round the hut and attempting its destruction. The fiends assumed the forms of hideous beasts and nameless monsters, a veritable "brood of Hell." that stretched out their claws to tear down the frail shelter that stood between them

and their victims. The saints pitied the exiles and fought on their side, but from a more terrible fate there seems to have been no deliverance. Soon Marguerite's lover succumbed to privation and suffering. The child born to them and the nurse followed, and Marguerite was left alone. But the nerve of the woman never failed. She continued to resist the attacks of the demons, and effectively defended herself against the assaults of bears, shooting three of them. When discovered by the crew of the fishing craft, who rescued her, she was clothed in wild beasts' skins, and on the point of starvation.

Clear of the straits, we entered the mouth of the St. Lawrence. The river flows north and south of Anti Costa, mingling its waters with the cross-currents of mighty seas. The steamer sailed south of the island, leaving English Bay on its right. From that point the banks of the great river are clearly defined, and the ocean passage may be said to be over. Thick fogs that hang over the river's banks are, however, not without their attendant dangers. Tides that wait for no man have to be studied in connexion with rapids and shallows, which frequently cause delay and spoil record passages.

Through this great waterway the early pioneers of the North-West sailed in their diminutive ships, surviving the perils of ocean to face the still greater dangers that lay hidden in the pathless forests that flanked the shore. There are probably no

records in the annals of restless adventure that exceed in heroism and self-sacrifice those of Champlain and Cartier, Brébœuf and Lallemant, types of the great army of explorers who faced the rapids of the St. Lawrence. Their names are indelibly engraved in its geography, their tongue is spoken in the cities reared on the river's banks, and their spirit animates their distinguished merchants and statesmen.

Adventurers and explorers had preceded Champlain, but they left no mark on history. They either perished in their attempt to penetrate the great unknown, or retreated in the face of dangers which only the bravest could dare. The hidden treasures of a great continent are ever an incentive to adventure and even suffering, but the objective may entail too great a sacrifice. It needs men cast in a different mould, who are not inspired by the wealth of seas, or bright jewels of the mine, but by far nobler projects, to put their hand to the plough and not turn back. Such a soul was Samuel de Champlain. At the dawn of the seventeenth century he joined an expedition to the Far West. De Monts, a French nobleman, commanded the ship in which the explorer sailed. It did not augur well for the success of the enterprise that the company was of the most heterogeneous nature. Men of gentle birth and honourable character were herded together with thieves and vagabonds, the veritable mauvais suiets

Volunteers and pressmen, Huguenot of France. divines and Catholic priests gave further mixed colour to the motley group whom Champlain joined This principle of on that memorable voyage. indiscriminate selection adopted by the first pioneers, militated more than anything else against the success of early French colonization. La Roche set forth on one of these expeditions with forty convicts whom he landed on Sable Island to starve and murder each other. Only twelve survived, who were saved from the inevitable fate of their companions by a passing ship. Bad citizens of the Old World cannot make good colonists of the New. Thieves, ruffians, and unscrupulous adventurers only succeeded in laying the foundation of the troubles which merchants and reformers encountered at a later date, and which made the early colonization of Canada both tragic and abortive.

Whilst De Monts vainly attempted to rule this first mixed colony, and treachery and disease were rapidly exterminating its settlers, Champlain began his explorations. He founded Quebec, and had his first experience of the severity of a Canadian winter. He saw the St. Lawrence struggling against the incursions of the Frost King, who had already exercised undisputed sway along the cliffs, where ice stalactites hung in innumerable lance points. The forest flaunted its sable robes, and the earth, held in an iron grip, drove the grizzly bear into deeper

hibernation and filled the land with the howling of hungry wolves. The severity brought with it suffering and death. Only eight out of the twentyeight men that joined Champlain survived that winter. Starving Indians attempted to cross from the opposite side of St. Lawrence to the settlers' camp. Drifting ice swept down the river, and jamming their frail canoes, crushed them like shells. The sure-footed Indians were equal to the occasion, and leaped from their skiffs to the ice floes. It is told that even women burdened with children accomplished that feat. They presented themselves at the camp, their bodies emaciated from long privation, and devoured the food given to them with the ferocity of tigers. They seized the carcase of a dead dog that had been lying in the snow for two months and used as a bait for foxes, but neither disgust nor remonstrances prevented them from thawing and eating the offal,

Through such a winter Champlain lived. Spring ushered in for him and his survivors, still weak and ailing, a period of new hope. A general west wind blew down the river and loosened its ice-bound banks. The frozen stalactites suspended from the cliff relaxed their hold and thundered to the ground. A prevision of open water set the wood duck inland on wing. Champlain looked on a new world awakened from sleep and arising to put on its beautiful garments. The early steps of Spring could

14 THROUGH CANADA

be seen in the loosening mould beneath his feet; in the delicate tracery of creeping plants that shot through the tangle of the brushwood; and the flash of the woodpecker's gay crest amongst the pine and balsam. Soon we shall cross his path again, and shoot some of the rapids where his canoe floated as he made his way towards the lake that still bears his name.

CHAPTER II

Quebec—Strategic position—Historic associations—Wolfe and Montcalm—Church of Notre-Dame des Victoires—Site of Champlain's Fort—The Hôtel Dieu—Landing of early Jesuit missionaries—Relics of Brébœuf and Lallemant—Falls of Montmorency—Where Wolfe failed—Kent House—Historical outline—Parliament—Denominational schools—Effects of confederation—Montreal—The situation—The Hochelaga of Cartier—Montreal of to-day—Institutions and schools—St. Anne de Bellevue—Macdonald College—Lachine rapids—Champlain's exploration of the Ottawa—Amongst the Indians—Defeats and conquests.

UEBEC, the ancient capital of Canada, stands conspicuously on the banks of the St. Lawrence. Its high cliffs can be seen far down the river. The white stone citadel that crowns its summit commands such a strategic position that Quebec has been called the Gibraltar of the American continent. The fort is enclosed by a high wall, which bristles with menacing artillery of both ancient and modern design. In front, an armed guard beats his monotonous round, but with no more sinister intent than to hand the visitor over to one of the Canadian regulars stationed in the fort to act the part of guide.

The altitude commands a magnificent outlook far as the Laurentian Hills and until the great St. Lawrence River becomes a mere ribbon streak on a forest plain. Thickly wooded islands, beautiful in their summer foliage, come into view. Of these, Orleans is conspicuous, the "Island of Bacchus," as Cartier named it, owing to the rich bunches of grapes that he discovered on its clustering vines. Clear spaces torn from the heart of the forest show their victories in green pastures and cultivated farms, still golden with the harvest of the ungathered grain.

Objects, rich in historic association, cluster round Quebec, which tell of heroism and tragedy, oftrepeated stories which cut deep into the emotions alike of French and English pride. The Plains of Abraham, where Wolfe and Montcalm waged the final battle that secured British rule in Canada, are in the vicinity. The site of the ancient St. Louis Gate. through which the French army, discomforted and broken, retreated, and Cape Diamond, marking the spot where Montgomery fell, have interesting and pathetic associations. Below the citadel, in scattered and irregular formation, extends the Lower Town. The Church of Notre-Dame des Victoires, erected on the Place du Marché, goes back to 1688. It is reared on the spot where Champlain built his fort. The crude pencil of the discoverer has left on record a sketch of the primitive fortification. It comprised a wooden structure of three buildings for himself and

his companions. An outer hoarding, loopholed for musketry, with a gallery all round, was the chief defence. Further precautions against surprise were provided by a moat, and a few small cannon that commanded the river from a raised platform. Within the fort was a courtvard and a dovecot. and in close vicinity a magazine and a garden. Where the chimes of Notre-Dame now ring their measured peals, Champlain listened to the details of the plot against his life from a ship's pilot, who turned informant. In the harbour, where the waters lap the cliff lower down, floated the ship where the traitors were arrested. It was on the highest pinnacle of that primitive fort, that the head of the arch-conspirator was spiked as a lesson and a warning to all whom it might concern.

The Hôtel Dieu, founded by the Duchesse d'Aiguillon, a niece of Cardinal Richelieu, dates from 1639 and is the oldest convent and hospital on the continent. The fine works of art that it contains, by Leseur, de Zurban, Stella and others, take a second place in the estimation of students who have walked the paths of history with Brébœuf and Lallemant, the high-souled missionaries of the Cross, of whom the world was not worthy. In 1626 these followers of Loyola landed in Quebec. The shelter of Champlain's fort was denied, and traders refused them admission to their houses. They wandered about in sheep-skins and goat-skins, being destitute,

and were on the point of re-embarking in their ship, when the Recollets of St. Charles' Convent offered them sanctuary. By a singular irony of events, the skull of Brébœuf and the bones of Lallemant were reverently received at a later date by the people who closed their doors against the martyrs in life. These relics comprise the priceless treasure of the Hôtel Dieu.

The Falls of Montmorency are only a few miles from Quebec, and are seen on the right, as the steamer passes up the St. Lawrence River. The cataract is 100 feet higher than Niagara Falls, but much narrower. From the deck, the Montmorency River, from which the Falls flow, cannot be seen, owing to the great altitude giving the spectacle the appearance of a wide silver belt thrown across the cliff. which a touch of sunlight burnishes. The Falls are 250 feet above the St. Lawrence. Incidents of the war centre round the spot; Beaufort House, the headquarters of Montcalm's army, is near. The Eastern shore of the river marks the place where Wolfe made an abortive attack on the French position, and from which he was compelled to withdraw with heavy loss. Kent House, once the residence of the Duke of Kent. father of Queen Victoria, now used for the purposes of a hotel, is in sight of the Falls.

In visiting the town of Quebec it is important to call to mind its history. The earliest settlers in Canada were the French, who came principally from

Normandy and Brittany. Although there is little of the Parisian stamp about the inhabitants, they are French in all essential particulars. Quebec and Gaspé are to all intents and purposes French towns. British have conquered Canada, but their Gallic cousins have preserved intact the leading characteristics of their nationality. Ouebec to-day is French in all things but government. Its language is spoken in its streets, and in its legislative assemblies; it is taught in its schools and circulated in its Press. Their population is increasing, and with it the process of absorption goes on. Tocqueville well said, the people of Quebec were more like the French than Americans were like the English. staunch Scotchmen have been so merged in this alien element that their characteristics have been drowned out. Scottish names are met with everywhere, but their owners only speak French. true of to-day; the soil has been so impregnated, that it will only grow the fleur de lys.

But there is a per contra account. When Canada became, in 1763, a British colony, the 60,000 French colonists also became, for good, British subjects, with the assurance that their customs should not be interfered with. The British cherished a strong conviction, the wish being father to the thought, that the French nation would be ultimately absorbed in their own. This proved a vain hope. When the United States attempted to annex the Dominion, the

French took arms in our interests. From that time forward, though in an indirect manner, the French by a tacit consent have had all their demands granted, and in the fulness of time the granting of legislative independence brought about amicable and inalienable relations between the two nationalities. The early pioneers who gave their lives in heroic and sacrificial service wrought better than they knew. Disappointed, heart-broken, martyred in their attempts to plant the Cross amongst its wild tribes, they unconsciously laid the foundations of a new France, loyal to the British flag and the best traditions of its own people.

Many French Canadians migrate westward, especially to Ontario, where they are gradually becoming anglicized.

Quebec nominates its Upper House, and nearly all the deputies in the legislative chamber, and a large majority in the legislative council are French. The province has the control of its own constitution, and the right to alter it at discretion. It has entire management of its own schools and public lands, and the Roman Catholic parochial system prevails. The two local Parliamentary parties, Liberal and Conservative are called Rouges and Bleus. Originally the Liberal party, or Rouges, stood for anti-clericalism, but it has changed colour as time progressed, and is now become as clerical as the Conservatives, and calls itself the National Party.

The question of denominational schools has been

a vexed one. The British North American Act of 1867 guaranteed that whilst education was delegated to the provinces, the Dominion or Federal Government reserved to itself the power to enact a system of tolerance for the dissentient schools of the minority. In 1889 the question of denominational schools assumed an acute form, and conflict arose between the French Canadians and those of the province of Ontario.

Consummate tact was required to establish and maintain peaceable conditions, but confederation has overcome the chief difficulties.

Montreal can be reached from Quebec by steamer or train. The river trip is slower, but more interesting. as the St. Lawrence higher up breaks into swift rapids, and the silent water becomes articulate as it dashes over huge rocks, and laps the exquisite leafy islands. Montreal, the Hochelaga of Cartier, is situated on its banks. Its beautiful wooded heights slope down to the river, and from the foot of Mount Royal a tableland extends until it is lost in the blue of far-off mountains. The summit of the mount affords a bird's-eye view of the city, and brings into sight many of the fine ecclesiastical and commercial buildings for which Montreal is celebrated. Seen through the eyes of Cartier in the 16th century, it was nothing more than a couple of score of huts roughly palisaded against the incursions of savage tribes. Today the traveller who follows the circuitous path to

the mount's height looks out on a population of nearly half a million souls. Where the first pioneer of this rapidly expanding colony saw a thousand Indians wildly gesticulating on the river's bank and marking their welcome to the mysterious stranger by song and dance, miles of storehouses are piled. Where the weird fires of the redskins' camp flickered in the dusk of evening, the arc lamp of modern civilization sheds its light. The rattle of chains of ocean liners along busy quays has displaced the liquid plash of the Indian's paddle, and the barges of the St. Lawrence, deep laden from the world's granary, fill a space once held in monopoly by the trapper's canoe.

Montreal has made great strides in progress of recent years. Not only has the population rapidly increased, but with it have grown up those institutions incidental to social and communal renaissance. The McGill University provides for the scholarship of its youths, and the Royal Victoria for that of its women. Elementary seminaries, such as Peel Street, and Aberdeen High Schools, accommodate nearly 2000 scholars between them. The Roman Catholic community, which is very strong, has Laval College for the study of law, art, medicine and theology, together with the colleges of Montreal and St. Mary's for more elementary subjects. With these the Redpath Museum and Redpath Library are connected. Banks, flourishing institutions all over the Domin ion, have

their headquarters in the city. Hospitals, well staffed and richly endowed, provide for the sick, of which the Royal Victoria and the Montreal General are the principal. Recreations are fostered in public grounds, of 460 acres, and in private clubs for golf, angling and shooting. There are many buildings in the Royal City of imposing architectural dimensions. Notre-Dame, the towers of which rise high above shops and warehouses, is said to be the second largest church in America, and St. James' Cathedral is modelled on the design of St. Peter's at Rome. All the great Protestant denominations have built their churches on an imposing, and in many cases magnificent, scale, and the Jews have their own synagogue.

At the foot of Mount Royal the finest private mansions of the prosperous citizens are erected. They are the outward and visible sign of the new age of an advanced civilization, as truly as the wigwams of two hundred years ago, that occupied the same sites, witnessed the age of crudeness and barbarity.

Following the St. Lawrence River, Ste. Anne de Bellevue is reached, which is more closely associated with the fortunes of Champlain. The wealth of Montreal has overflowed to this charming resort. Through the munificence of Sir Wm. C. Macdonald, one of the merchant princes of Montreal, a magnificent college has been erected at Ste. Anne's. It covers 561 acres, and is replete with facilities for teaching and

research. Its imposing grounds attract attention on entering the little French-Canadian town. Well-trimmed lawns and recreation fields surround it. It provides a school of agriculture and one for household science, and is open to both sexes. A practical course of training in live-stock, cereal husbandry, horticulture, and poultry covers two years. A still longer period is occupied with the higher branches of botany, bacteriology, and natural science.

The Macdonald College is connected with the McGill University, and is free to the sons and daughters of the farming community of the province. Outside that area students have to pay £10 a year. There are experimental grounds laid out for the purposes of illustrating research in grains, grasses and flowers. Small model farms for horticulture and poultry-keeping, as well as live-stock, give facility for the most practical and up-to-date knowledge of these branches of scientific farming. The laboratories are equipped with the most modern appliances, and a large and highly qualified staff of professors and assistants is employed. I visited the college on the opening day, and attended some of the lectures. Students came all the way from British Columbia, a distance of some 3000 miles, and so popular is the institution that there was not a single vacancy at the beginning of the There is accommodation for 200 men and session. 175 women. Most of the provinces of the Dominion make their contributions to this centre of learning on



NORTH AMERICAN INDIANS. A CHIEF'S COAT OF ARMS



which so much depends. Travelling through the Rocky Mountains, I found myself in the company of a young farmer from Medicine Hat on his way to the college for a special course on scientific and dairy farming. A farmer from Winnipeg who had sent his daughter to be trained as a teacher was amongst the vistors on the opening day.

Between Ste. Anne's and Montreal there are the celebrated Lachine rapids of the St. Lawrence, which supplied the inspiration of Tom Moore's "Canadian Boat Song." A pleasure steamer on the river shoots them. Pressing up stream the great Canadian river leads to its source in Lake Ontario in the south-west. The Ottawa flows from the northwest-a twin river fed by innumerable streams and minor lakes. It was this that Champlain navigated it the spring of 1603, which forms a thrilling chapter in the life of the early pioneer. Its rapids, which nearly cost the explorer his life, still plunge over rocks and down steep declivities, as on the day when he first breasted them. Carrillon and Long Sault seethe and foam, evoking answering calls from the neighbouring forest. Scattered homesteads and budding towns here and there encroach on the Ottawa's banks, but the upper reaches are as much a solitude as when Champlain pressed through the dense forest, or lay at night by the Indian camp Trustfully yielding himself to the mercy of fire. the savage tribes of that locality, he faced the

river. His pluck and daring so inspired these children of the forest, that to them he became the king of medicine-men, whom difficulties could not daunt nor dangers dismay. Faith answered to faith, and the Indians pressed their frail canoes up rapids at his behest, to which the spoil of the chase or the lust of conquest would never have spurred them. They invoked Manitou, the spirit of the river, on his behalf, and threw their propitiating gifts on the seething cataracts which barred their way. They carried their canoes through dense woodlands, and braved the hardships of hunger and the perils of the forest until they reached the country of the Ottawa tribe on Lake Coulange.

The coming of Champlain and his companions was looked upon by the Indians as nothing less than miraculous. We read that warriors gazed upon him in reverent wonder. "How could he have survived the perils of forest and rapids?" they exclaimed. Surely the white man had fallen from the clouds!

Champlain's own account of the voyage is recorded, and the difficulties which he had to surmount. Chief amongst these were the dissuasions of the wise men amongst the tribes, who advised desistance. But the voyager had set his mind on exploring the Ottawa, despite all such advice. Driven back for want of canoes, and duped by a lying counsellor, he was checked in his first attempts.

Two years later he set out for the Ottawa again, and reached Lake Nipissing, marking his way on the banks and islands with large crosses of white cedar, the emblem of his faith and the Ebenezer of his triumphs.

CHAPTER III

Ottawa Government and Toronto—Industries—Institutions and factories—Adoption of English customs—Aggressive commercialism—Fruit growing—Through Norfolk County—Comparison with English fruit growing—Fruit preserving—Cost of labour—Bees—Poultry—Cheese—Bass fishing on Lake Erie—Rods and tackle—Niagara Falls—Gifts to Manitou—A great national utility—The mines of Ontario—Official returns—Sudbury, Cobalt, and Porcupine—Encouragement and warnings.

TTAWA, the seat of the Dominion Government is situated on the banks of the Ottawa River, and on the boundary line between Quebec and Ontario. The Upper House or Senate, is composed of members, elected for life, having a property qualification, and not under 30 years of age.

The House of Commons, the Second Chamber, is elected every five years or at dissolution of the Government in power. There is no property qualification, but only British subjects are eligible. The members of both houses receive £200 per session with travelling expenses, and all polling at general elections takes place on the same day.

The society of Ottawa is chiefly of the official

order, but the flourishing timber traffic and other interests have established a large industrial community there.

Ottawa does not owe its position as the seat of the Government and the capital of the Dominion to its population, which only numbers 88,737. however, making marked strides in progress, and is annually justifying the distinction it enjoys as the premier city. Its imports and exports, according to the returns for 1910, amounted to £1,800,000; its postal revenue to £40,000 and its Clearing House returns, a sure symptom of progress, to £34,600,000. The city assessment reached £10,101,641. Ottawa is said to have the greatest water-power in North America. Within a forty-five mile radius, this is said to equal 900,000 horse-power. The erection of new Government buildings, palatial hotels, and the laying out and improvement of public parks and drives, are in harmony with a city that is rapidly developing, not only in commercial importance, but as an artistic and literary centre.

There are already ten railways running into the city, and three more are under construction.

Toronto, the Queen City, is reached from Montreal in a night's journey. It has no Mount Royal, which commands such a fine panoramic view. On the other hand, it is not an island, and has the possibilities of expansion to an unlimited degree. Its growth in population has been rapid, doubling the number each

census. In 1880 it was estimated at 170,000; the last 1910 returns show a leap to 402,567. Its assessment is £61,829,410. It is the seat of the Ontario Government, the buildings of which are undergoing the process of enlargement to meet the demands of increasing departments. Toronto has a university of over 4000 students, and the industries it fosters are many and varied, including 978 factories, which give employment to over 75,000 hands. It leans towards English customs and habits in as pronounced a degree as Ouebec gravitates towards French. Religious life is typified in handsome architectural edifices representative of all the denominations. Its commercial enterprise effectually detracts from its beauty as a city. Its streets are interlaced with trams and railway lines, and its sky almost blocked out with towering stores, and a tangled network of electric The facilities for getting about are a set-off against this unæsthetic and undiscriminating commercialism. Tram-cars ply to and from the suburbs. where primitive conditions are still preserved in park and stream and rural charm.

Toronto is situated on Lake Ontario. The belt of land stretching along the north shore is one of the chief fruit-growing districts of Canada. The effect of this beautiful inland sea is to modify the summer heat, and temper the winter cold, and so exercise a beneficial influence on the soil. It is almost impossible to realize that about fifty years

back this fertile track, sweetened with snowy blossoms in springtime, and rosy luscious fruit in autumn, was entirely forest and impassable with the exception of an occasional trail. Within a few hours' journey from Toronto, orchard farming offers good openings to small capitalists, and a training ground for those who must wait a few years before starting on their own account. Norfolk County, Ontario, is typical. It has many features akin to the English landscape. Hill and dale alternate, well-cultivated farms, in which the thickly set sheaves of corn stand, attest the bountifulness of the harvest. Herds of sleek cattle and flocks of sheep line up by the palings, as if not sure yet what sinister intent the great snorting unclassified animal has on their pastoral peace. Were it not for the palings, those inseparable concomitants of pioneer agriculture, one might imagine himself in the Motherland. Nothing but a green hedge is needed to complete the illusion.

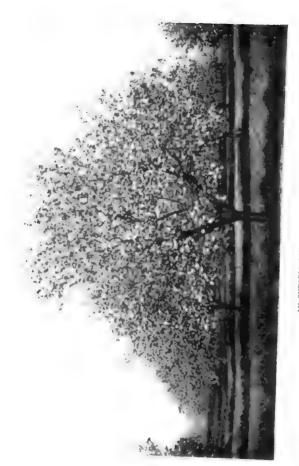
Further on in the journey a broad river, moving with a sedateness suggestive of depth, rolls down the valley, deepening the green on its banks, and carrying irrigation to the low-lying plains. The great rivers of Canada have an economic value of incalculable worth to a land where summer sun is rarely clouded.

The orchard district of Norfolk County offers to the settlers land already cleared of the bush. The long and tedious process of cutting, burning, and

blasting, is dispensed with, and the harvest return is not long deferred. A member of the Provincial Parliament, and an expert in this department of agriculture, took me over a couple of these farms. He had recently visited our own country, and was therefore in a position to make comparisons, and of quite an unprejudiced nature. He had gone through Kent, and was struck with the high rentals that obtained there. They were prohibitive compared with Ontario. A freehold farm of fifty acres was offered in Norfolk County for £200. One grower raised from an orchard of eight acres £518 worth of apples, giving a profit of £203 after paying all expenses. Another realized a profit of £89 from three acres. Much, of course, depends on the age of the trees. Mr. E. D. Smith. President of the Provincial Fruit Growers' Association, states in the report of 1910 that in Ontario there are 7,000,000 apple trees, which should, at the lowest, yield 7,000,000 barrels of the best quality of fruit in addition to inferior sorts.

Large quantities of "culls"—apples too small to peel—are dried and shipped to France and Germany for jam and cider.

Peaches are abundant throughout Ontario, particularly in the Niagara Valley, which is specially adapted to their cultivation. They also flourish north of Lake Erie, where I saw trees, laden with them. An interesting experiment was successfully carried through whilst I was in the Dominion. A



AN ONTARIO GOVERNMENT ORCHARD



consignment of peaches was shipped from Ontario to a London fruiterer, which, according to a cablegram, arrived in excellent condition. This was regarded as a first step to supplying the London markets with this choice fruit.

In Prince Edward County the tomato in particular is cultivated. It grows in the open and the yield is good: 500 bushels to an acre is an average crop. Fruit produce is extensively preserved in Canada, and widely shipped. Forty-eight million pounds are annually packed in this form. I visited one of these canneries on the shores of Lake Erie. There they pack 50,000,000 cans a year. The expense of labour is considerably reduced by using natural gas for their machinery. An engine of eighty-five horse-power can be run at a cost of 5s. 3d. a day. The gas was lit in the town through which we drove; this seemed singular in the full light of day. The explanation was plausible: it was cheaper to keep the gas burning than pay a man to go round and turn it off.

That Lilliputian but indefatigable farm labourer, the bee, realizes the ideal conditions of getting and giving. Some farmers keep them for fructifying their blossom, and use the honey as a by-product. As an industry in itself, bee farming is becoming popular, and commands an extensive market.

With regard to fowl-keeping one might describe poultry, figuratively as well as literally, as running alone. Hens are no expense, as they cater for themselves. Chickens and turkeys are more generally raised than ducks and geese. In eastern Ontario dairying is the chief farming industry. The British Isles are a market for the produce. The factories for cheese and butter are for the most part co-operative. Hastings County alone sends £400,000 worth of cheese annually to the Mother Country. The combined output in Ontario is £3,000,000 yearly. The co-operative system is said to be an advantage to the small farmer, who no longer has to bear all the expense and risks and find his own market. He only has to send the milk to the factory to be churned into dollars.

Cheese-making as an art is taught at the Macdonald College. I saw Stilton and Cheddar specimens in no way differing in quality from their English ancestors. The breed of milch cows in Ontario is receiving great attention.

It was only a short run from the fruit fields of Norfolk County to the black bass waters of Lake Erie. Mr. Pratt, being a Waltonian, cheerfully accompanied me.

We were fortunate in having as our companion Professor Xavitz, a government expert on forestry. We all shared the hospitality of Dr. McInnes, a sportsman to the manner born. He is a veteran in years but a youth in spirit, with the Scotch mother-tongue still triumphant, despite long residence in the Dominion. He lives on the lake shore, and at

6 a.m. we fortified ourselves for the expedition with a substantial breakfast, in which ham suspiciously York flavour formed the pièce résistance. Long before the first fierce rays of the sun struck the lake we were far from the shore in a motor boat, the doctor's fine baritone ringing out cheerily at the jokes and bons mots that garnished the feast of reason and the flow of soul. distance of twelve miles to travel before the fishing ground would be reached. It lay off the point of an island far away on the horizon. A couple of buoylike marks on the water showed that other anglers were already on the spot. Four miles off St. Williams lay White Fish Bar, where the doctor had one of those much-coveted Lake Erie shootings. A wood duck, winging its flight across the water, led to a discussion on the merits of the sport it gave. Red head, canvas-backs, black duck, pintails, teal and mallard, the latter a distinct species, would visit the place with the first snap of cold, and as many as thirty to forty brace would be bagged in a day's shooting. These hardy birds travel at a great pace, and are as difficult to stop as driven partridge with a gale of wind behind them. Taking one shot on the approach, they will be out of range of the second barrel on wheeling round. The islands that afford such sport consist of a good deal of marsh land, where wild rice grows, on which swan and duck flourish. The Government charge high fees for shooting. Long Point, standing away on the north-west, commands £2000 per gun for a life interest, and a select club of sixteen holds the monopoly. The island is twenty-one miles long, and three wide. It is well wooded in places, and in addition to other game there are two or three thousand deer.

Bass, like trout, take to the deeper parts of the lake during July and August. In the spring they are found on the shallows, where they rise to the fly, and take a silver doctor, a Jock Scot or a dusty miller. Minnows, which abound in Lake Erie, as well as perch fry, demoralize the bass as they do trout in Irish lakes. When they begin to gorge on these, flies dance over them in vain. Their cannibal tastes had to be studied, and we netted a bucket full of these small fry before starting. They are mounted on a gut trace with a single hook attached, and a sinker sufficient in weight to carry the line within a foot of the bottom. Canadians use short steel rods, a multiplying reel, and stout tackle.

The outfit scarcely commends itself to a scientific angler. The gut is strong enough to play a salmon, and the rod is stiff and only from four to six feet long. Steel does not possess the flexibility of split cane or greenheart. A multiplying reel seems to me both clumsy and unnecessary, and is mainly fruitful in multiplying the angler's sorrows. The object—the rapid recovery of the line—is scarcely needed in the case of bass. The fish do not take

long runs like salmon or trout, but bore like the grayling, making the best use of the large dorsal fin. The tax on the spare line is slight. I have had many a bold run from trout and salmon, which nearly emptied the reel, but I have no recollection of any difficulty in recovering the slack on the fish's return journey. The immediate effect of the weight of a fish on a multiplying reel is a tension, which makes winding impossible. This is due to the complication of wheels within wheels, and the locking of the cogs. The only way to recover the line is by rapidly lowering the rod, when the winch can be worked freely enough. This process is repeated, until the needed quantity is recovered. Anglers will, I think, agree with me that to give a fish a slack line runs the risk of giving him his liberty. I have known trout and salmon that only needed a moment's slack to get rid of the hook effectively. If a fish is firmly hooked it does not matter; but how often does the fly drop from the mouth of the trout and salmon the moment they are netted! Had the slack been given before netting, they would have escaped.

No doubt the strength of the tackle which the Canadians use enables them to give the bass rough handling. With fine gut, a stiff rod and an unyielding reel could scarcely be used without losing many fish. I think it is possible that the time will come when coarse tackle will affect the weight of the creel.

Bass are at present unsophisticated, and therefore bold feeders; but so were trout in our English waters years ago. Meanwhile they have become educated, and the greatest wiles have to be practised to lure them. Nothing but the finest drawn gut is used on many chalk streams, where once rough tackle made heavy baskets. Bass can be educated too, and I found lakes, where once they fed freely, which barely yielded a brace per diem. It may be that the stock is depleted. With the causes of that I shall fully deal later on.

In discoloured water on a dark day the nature of the tackle is not of so much moment. But in water crystal in its purity, with the bright Canadian sun added, coarse tackle is likely to reduce the take.

An ideal rod for black bass is a ten-feet split cane fly pattern. This yields to all their movements, and finer gut may be mounted. My outfit consisted of a Hardy Brothers' "Houghton," and "Perfection" reel. I lost only a small proportion of the fish hooked, and had no smashes, although I used nothing stronger than a refin trout gut. With this outfit I believe I had the maximum amount of sport these gamey fish afford. A pike, after a bold dash, cut the gut, but that is a contingency likely to arise where one does not use gimp. The take for the day, with a quartette of rods, included thirty-nine black bass, largest, $2\frac{1}{2}$ lb.; one rock bass, $\frac{3}{4}$ lb.; one sheep's head, $2\frac{1}{2}$ lb.; three wall-eyed pike, largest 4 lb. We

only kept the regulation number; the surplus were returned, with a host of smaller fish not included in the list. Mr. C. S. Williams, proprietor of Lake View Hotel at Long Point St. Williams, supplies motors and angling requisites.

The delightful day on Lake Erie all too soon came to a close. As the motor boat raised her anchor a magnificent sunset lit up the western sky. water was so smooth that the effect was mirrored in an unwavering reflection. No pen could describe nor brush portray the richness of the carmine or the delicacy of the blue that lit the heavens. Canadian sunsets are unsurpassed. As we neared the shore the light was rapidly waning and the distant woodland already veiled in darkness. We passed a lotus bed near enough to see the plant's broad leaves closing for the night. It is said to be one of the three that exist outside Egypt. There is little twilight in the Far West, and by the time we reached the landing stage night had fallen. Everywhere there was stillness except on the borders of the wood, where the exquisite notes of the vesper sparrow rang out with a richness of song equalled only by the nightingale.

Lake Erie is the head-waters of the greatest natural phenomenon on the American continent—the Falls of Niagara. Out of its great expanse of water the river flows that plunges across the chasm. and silently sinks into Lake Ontario with no sign of its adventurous journey save a foam-streaked surface

I took the first opportunity of re-visiting Niagara. More than a score of years ago, during a holiday in the United States, I saw the magnificent spectacle for the first time. The setting of the Falls had undergone some change meanwhile. A bridge linked Goat Island with the mainland, and commercial obtrusiveness along the shores had left its desecrating marks in huge and unsightly buildings.

But the Falls, ah! nothing could spoil them. The deep diapason of their roar had not grown less. The myriads of crystals, dazzling in their brightness, still rolled over the precipice and thundered into the yawning abyss, ever athirst with insatiable greed. The mist still veiled the cataract, and the spray bow formed its complete circle; no segment this, but, an infinite round, in keeping with infinite marvel.

I walked through the Cave of the Winds, and heard the shricking as of ten thousand fiends, and was whipped with the water lashes of offended spirits. I watched the rapids below the Falls, seething and foaming as if the water had grown mad, with the great leap across the precipice. The power that lies hidden in this world's wonder has made its appeal alike to superstition and science, in the one case working tragedy, in the other utility. We see the young Indian girl set adrift in her canoe, laden with fruit and flowers, and swept across the Falls, the annual offering to the great Manitou, which

NIAGARA FALLS



troubled the waters and exacted such toll from mortals. One recalls the case of the Bristol youth who fell beneath the river's spell, sold his property, and became the hermit of Goat Island; and there, ever with the call of the wild in his ears, at last yielded to the fascination and plunged into the maelstrom in obedience to the behest of beckoning spirits. But other times, other manners; and to-day the power of Niagara has been converted into a public utility, and the great spirit, once the despotic master, has become a docile servant. It may spoil the romance to learn that the tram-cars of Toronto and Windsor, the latter 120 miles distant, are hitched to the Falls. Such is the latest adaptation of water-power to municipal needs.

The eye of the appraiser has looked upon the river and read in it a value for national purposes of £400,000,000. Science has measured its flow, and averaged it at 75,000,000 gallons per minute. Engineering has converted the figures into dynamics, and made them stand for 6,000,000 horse-power.

It is scarcely a matter for wonder that commercial enterprise should seek to utilize so mighty a force when we learn that it is equivalent to the aggregate power of all the steam engines and boilers in the United Kingdom.

Once more let us turn our eyes on the Great Falls, and cancelling the dollar aspect, try to realize that the power embodied therein is capable of

working to the full every railway and factory in Great Britain and Ireland. At such a moment one feels kinship with the simple-minded red Indian, and uncovers his head and worships.

When the power of Niagara is drafted into service, and fulfils a public utility, instead of fostering a superstition, there is no need to quarrel with the new point of view. The project, happily, has not been allowed to become a vested interest and the monopoly of a private company. The Ontario Government has guarded against that by taking the matter into their own hands. The effect has been to cheapen the national cost of electricity, house-lighting has been reduced 50 per cent., street lighting 31 per cent., and motor-power 37½ per cent.

The incidental advantages of the water-power of Niagara are summarized in the Board of Trade report:

"The employment of electricity carries with it other advantages in addition to that of cheaper power, and these are, in some cases, of greater importance.

"The use of electric power for street railways and the consequent cheapness and increased rapidity of transport has, by widening out the living radius, contributed greatly to the comfort of the population, and diminished to a considerable extent unhealthy crowding in city tenements.

"In the factories themselves, the use of electric motors for driving electric machinery, by doing away to a large extent with pulleys and counter shafts,



THE ERIE RIVER, NIAGARA RAPIDS

has made machine rooms healthier, cleaner, and better lighted."

The mining industries of Ontario for the most part are happily shorn of those sensational elements which engender wild excitement and fevered expectation among speculators and adventurers.

The traveller who skirts the northern shores of Lakes Huron and Superior has little conception of the hidden mineral wealth that lies beneath the hills which the railways burrow. West and east, north and south, mines are being discovered and worked. With better machinery and the application of modern methods of engineering, the marketing of mineral wealth becomes only a question of time.

The report of Mr. Thomas W. Gibson, Deputy Minister of Mines shows the annual progress made since 1903. The various products are valued as follows:—

As compared with 1908, the year 1909 shows an advance of 28 per cent.

The nickel and copper of Sudbury were the first to be developed in the province. In this district the Canadian Copper Co., the Mond Nickel Co., the Dominion Nickel Co., and the Helen Iron Mines are situated. The latter are the largest shippers of ore.

To the same district belong the Moose Mountain Iron Mines, where the process of treatment, which is most interesting, may be seen. The ore is taken and reduced to an inch product by crushing, after which the waste rock is separated by a magnetic process. The ore is then placed in crushers and reduced to a uniform size of less than an inch. It is then conveyed to the magnetic concentrators by means of an inclined belt. Next it is shot into bins which discharge their contents into magnetic separators, and finally conveyed into the cars of the Canadian Northern Railway to be shipped. About 800 tons per hour can be loaded.

Extensive iron deposits have been discovered at Grand Rapids and Blairton, and marble and graphite at Bancroft and Wilberforce, in the Hastings district.

Four of the iron mines produced during 1909, ore to the extent of 119,207 tons, and the Helen mine at the Sault yielded 112,246 tons. The returns from eight blast furnaces were estimated at £1,395,483 worth of pig iron, and £1,571,081 worth of steel.

Cobalt is another centre of great mining importance. Its chief output is silver, which from 1904 has been a rapidly growing industry. The official returns since that year are given at 93,977,833 oz. of silver, valued at £9,665,456.

The chief Cobalt mines and their output are as follows:—

Nipissing 5,584,742	OZ.
Crown Reserve 3,158,156	"
Kerr Lake 2,877,299	,,
Corriagas 2,621,681	,,
Mackinley-Darragh-Savage 2,607,071	,,
Temeskaming 1,887,127	,,
Buffalo 1,514,895	,,

In Cobalt and its vicinity the production of silver in 1909 exceeded any previous year, the total being 26,000,000 oz. The towns of Elk and Smith on the Montreal River form the distributing centre of this area. There are nearly 150 mines in the district. The Northern Customs Concentration Co. is situated on the town site of Cobalt. It obtained the contract in 1910 for concentrating the mining ore of La Rose and City of Cobalt mines. The process carried on here is both complicated and elaborate. The ore goes through a crusher, and is reduced to a three-quarter inch product. It is then subjected to several processes of separation, and ultimately passed over canvas.

Mr. T. W. Gibson sums up the industry in this district in the following words:—

"The seven years which have elapsed since the opening of the mines of this remarkable camp have been seven years of increasing plenty. The ratio of increase is now lessening, and 1910 will not exhibit as great an advance over 1909 as 1909 did over 1908. Indeed, if no new and unexpected additions be made to the known sources of production, it may well

be that Cobalt has reached or is approaching its climacteric, for it must not be forgotten that a mining camp will not last for ever. The present rate of production may, however, be maintained for some time to come, and doubtless Cobalt will be producing silver a generation hence."

Porcupine goldfields, which attracted a good deal of attention recently, are situated in Whitney and Tisdale, west of the recently opened Temeskaming and Northern Ontario Railway, and near to Kelso on the Canadian Pacific.

In 1899 the region was explored by Dr. W. A. Perks on the behalf of the Provincial Bureau of Mines. He discovered gold widely distributed, whilst the region south of the trail to Porcupine and other areas showed traces of the metal. With the approach of the railway in 1907, there was a rush made by Victor Mathison for Nighthawk Lake District. In 1909 John S. Wilson and a party discovered Dome Mine, and from that centre a region of fifty miles yielded gold, varying in grade to the prospector. A boom in speculation followed. A letter to the "London Times" urged the investment of British money in the enterprise.

A Glasgow firm sent out a representative to investigate, with the result that the Scottish Ontario Syndicate, was formed, and property was acquired. Other British companies followed.

Expert opinion was generally favourable to the

new venture. Three thousand square miles were prospected and over 1000 claims staked. The speculative brokers exploited the Press, and companies were formed without difficulty, on the assurance that a northern El Dorado was discovered. "Chunks of gold," "Phenomenal finds," "More gold in a single property in the Porcupine than in the whole state of Nevada," were the seductive headings of articles and prospectuses.

Friendly caveats were not wanting. A Scotch expert said, "Yes: there is gold, but Porcupine is no poor man's camp; much expensive machinery will be needed. If there are millions in the ground, it will take millions to get them out." Two other opinions are worth quoting, Mr. H. E. T. Haultain, Professor of Mining at Toronto University, said, "The good gold values were first recognized about nine months ago. and one cannot form any definite opinion as to the work accomplished in such a short time. Still, the fact remained that while too early to be sure, the camp gives great promise. Very many of the claims which have been recorded will undoubtedly produce disappointment instead of gold. Many of them are located on swamp ground, and many of them are claims staked when the snow mantled the earth. Much quartz will be discovered that does not carry commercial value. To sum up, after nine months' life, the Porcupine camp affords well-based hopes that it may become a valuable gold-producing area, with greater permanence than has hitherto characterized Ontario gold camps."

The other opinion came from Mr. R. W. Brock, Director of the Geological Survey, Ottawa.

"The district furnishes remarkably tempting specimens. About 0000 claims have been staked, the great majority of which have, of course, no real present or prospective value as mines, but they are in Porcupine, and can be bought or sold. But there are some really good-looking prospects. Ouartz is remarkably widespread over the district, and visible gold is abundant in some showings, and has been found at numerous widely separated points. Most of the gold occurrences so far located are in Tisdale township. but some of the properties are in Whitney, others in Shaw, and in the Forest Reserve. Porcupine is yet in the prospect stage, but it has some of the essential qualities of a gold camp, sufficient to have induced experienced men to take up options at high figures, and to undertake large expenditures to determine if it possesses all the essential factors."

The Government attitude on the subject was frankly expressed by Mr. Cochrane, Provincial Minister of Mines, who visited Porcupine personally to investigate the prospects. On his return he warned the Press that the Government were determined to suppress "wild catting," and make it unpleasant for speculators. All dangerous or illegal statements in prospectuses would come under

ENCOURAGEMENT AND WARNINGS 4

strict surveillance, and closed this declaration in words creditable to himself and the Government he represented:

"Ontario is in a fair way to materially expand her development, and augment her resources as a result of sound, prudent, and businesslike operations in the Porcupine field. But if the Province is to secure the best results in every direction, there must be wholehearted and determined co-operation on the part of the Press and the Public to combat all wild-catting operations."

There were 282 mining companies incorporated under the laws of Ontario in 1909 with an aggregate capital of £47,376,600.

CHAPTER IV

Algonquin National Park—Simcoe Lake—Barrie—Muskoka Lake—The Great Forest—Primeval conditions—Cache Lake—The hand of the spoiler—Conservators' report—Animal life—Trout fishing on Cranberry Lake—Scientific and unscientific angling—Camping out—The Indian canoe—The Corkscrew River—My guide—Beavers' dams—The beaver's house—Co-operative labour—The romance of a monogamist—Canoe Lake—The Thunderstorm—Fishing Lakes—Down the Muskoka River—Battling with the rapids—Whiskey Falls—Deer and their habits—The Dolly Varden trout—Wet and dry fly fishing—Fresh fish for supper—Lumbering, and injury to trout streams—Befriending drowned-out campers—The howling of wolves—The rush through the forest—A wary quarry.

THE Ontario Government preserves in Algonquin National Park all the primitive conditions of Eastern Canada. En route by the Grand Trunk Railway a low-lying flat suggestive of the Netherlands is traversed, which has probably given its name to the Holland River which waters it. As the journey progresses, it leads to the uplands of Ontario, where natural beauties unfold themselves in great variety. By the time Algonquin Park is reached, a distance of 200 miles from Toronto, the

train has climbed to an altitude of over 1500 feet above sea level.

On the journey, Lake Simcoe is touched, a picturesque sheet of water. The town of Barrie on the opposite side can be seen nestling in a red setting of comfortable-looking English villas. It is a popular resort, much frequented by the paterfamilias of large neighbouring towns and cities. Wooded islets are dotted over the lake, vachts expand their white sails in the light breeze, and canoes gracefully glide over water Italian in its blue depths. As the train skirts the lake, sea-gulls rise and whirl out of danger in an agitation that shows them still unreconciled to this encroachment on their solitude. Kempenfeldt Bay, reviving another Dutch memory in name only, comes after Barrie, and is twenty-five miles long. There Muskoka Lake, bathed in all the splendour of the sunset, marks another stage in the Highland journey. A pale-faced girl leaves the train with fresh elasticity in her tread. She has been the victim of typhoid, of which Toronto, magnificent city that it is, is by no means innocent. But Muskoka, with its green pines and lichen-shaded rocks and its air of heaven-distilled purity—the red steals into the livid face at the very sight of it.

It was dark when the train climbed up the last ascent that led to our destination. But the concentrated sound enabled the senses to feel the proximity of the forest. Now and again the loud roar of a

cataract could be distinctly heard above the rumble of the cars. The forest covers an area of 1.800,000 acres, intersected with over a thousand lakes and rivers. The sense of vastness which this suggests is overwhelming. It is Canada in its primitive and undisturbed condition. Put down in the midst of Algonquin a line of fifty miles extends in every direction without a break, through primeval forest and lake, except where fire has burned a clearing, a trail has been made, or a tornado ripped a gap. Everything is as it was a thousand years ago; the fish that swim its water; the beaver that constructs its dam; the wild deer that on nimble feet rush through its thickets; the bear that wags his sullen head in ambling gait, and the woodpecker that rings from its majestic pines the weird vibrating note.

Cache lake was our starting point for a canoe trip through the waterway of the forest. In looking across, it seemed land-bound and isolated; but what appeared to be forest, on nearer approach proved to be overlapping islands. The ranger that accompanied me paddled for a certain point, and as the canoe approached, something like an enormous foliage gate threw open its portals, disclosing a second lake lying beyond. In reality Cache is only a link in a chain of lakes, all connected by narrow cuttings and ultimately passing from the forest in rivers like the Muskoka and Madawaska, which glide and leap and brawl until they grow silent in greater

rivers or far-off seas. The wealth of beauty into which these waterways lead is probably unsurpassed by anything that Canada possesses in forest scenery. The lakes with their wooded slopes and shapely promontories; the islets clad in green from the pale shade of the birch to the deep tint of the pine and balsam; and the restfulness of it all, a broad expanse of water, ruffled only with the gentle breeze that chases rippling waves along its banks, and makes panpipe music amongst its reeds and rushes.

In one particular only can the hand of the spoiler be traced out in the primeval forest. narrow watercourses that connect the lakes have a margin of dead trees, that present a melancholy contrast to the exuberant floral life that lies behind them. How came this touch of death, this blight of forest, as if some pestilential breath had swept these water avenues? The answer is found in a too wanton commercialism, caused by the lumbering industry. Great dams have been erected in the rivers that drain Algonquin Park. Their object is to hold up the stream until the time comes for floating down the huge log rafts. This pent-up water floods the margin of the forest; the trees are literally drowned, and stand dismantled of every vestige of This is only one effect of lumbering; there is another which the traveller does not appreciate until he passes through the Rocky Mountains, or explores Vancouver Park. There the magnificent

Douglas pines rise in towering height into the blue dome of Heaven, some of the finest specimens of trees in the world's arboretum. Algonquin Park once held them even as the valley of the Selkirks and the fertile soil on the shores of the Pacific. But the lumber merchant's axe rang out the death of these gaints, and the Ontario Park knows them no more. Canadian foster-parents in their early struggles had to pawn their household effects in the interests of their infant prodigy. That the end justified the means there is probably no question, but the price was a terrible one. In honour to the Government, let it be said that their reports make the admission, and active steps have been taken to remedy the evil as far as possible. A Commission of Conservators was appointed in 1909 to deal with the "Conservation and better utilization of the natural resources of Canada." The first report, 1910, has been laid before Parliament. In this the question is raised: "Can our forests be conserved and perpetuated, and can waste lands denuded of forest growth and unsuited for agricultural purposes be re-forested and make a source of value to the State? The question is answered in the affirmative. That the Ontario Government is alive to the situation is shown in the steps it has just taken. The rights of a large lumber company were purchased last year at a cost of £58,000. The importance of the transaction will be understood, when it is added that the

company in question had rights of felling timber in Algonquin Park which covered an area of 350 square miles, as well as working mills and iron logging railways connected with the industry.

Algonquin Forest has other resources. It abounds in animal life, and its rivers and lakes hold coarse and game fish in considerable number. All hunting—to use the Canadian equivalent for shooting in England—is prohibited within the precincts of the Park, but angling under proper regulations is permitted. As the pursuit of the gentle craft was one of the primary objects of my visit, I am dealing fully with the subject.

Cranberry Lake was the first we fished, which only entailed a short portage. A well-defined bridle path through the forest, led to it. A clearing at one place brought us up to our waists in a bed of wild raspberry canes, laden with ripe fruit. A peculiarity of the forest is the remarkable phenomenon that wherever a clearing is made, raspberries spring up. Be it the effect of fire or axe, the result is the same. We had only to extend our hands, without stopping, to gather sufficient for our needs, and the quality, like most of the wild fruit of the Dominion, was excellent.

Cranberry Lake derives its name from the berries that once flourished there. The plants have of recent years been destroyed by the beavers. These rodents, which include all succulent roots in their daily fare,

have multiplied enormously in the park, and the water lilies and other lake flora have suffered in consequence. The lake is a gem, with rising slopes of forest in the background; and although it was only August, precocious sugar-maple trees had blazed into red here and there and anticipated the glories of the Canadian autumn.

We procured bait for our fishing expedition, close in shore, where minnows and perch fry swarmed. The trout in the lake are the grey species, which during the hot weather take to the deep water and can only be caught by trolling or still fishing from an anchored boat. I used a trolling rod and reel with a silk line and gut trace. Towards the centre of the lake the water is deepest, and as we fished up and down it was satisfactory to have the calm placidity of the surface agitated by the struggles of a trout now and then, that had seized the bait and paid the penalty by becoming fast hooked. I eschewed heavy sinkers, and the movements of the fish were not unduly hampered.

The common method of catching them, judging by what I saw, is by means of a solid copper wire, which does not give the fish a chance of making a fair fight, and from a scientific angling point of view, I think, ought to be regarded as a reprehensible form of tackle. The wire in question is usually 100 yards long, and although thin, possesses considerable rigidity. A silk or hemp line yields to every

movement of a fish, and the issue lies between strength on the one hand and art on the other. A copper line is a dead weight against which it is impossible for a trout to contend with any dash and spirit. plea is that the fish lie deep, and heavy tackle must be used to reach them. The answer is obvious. A sinker can be attached to a silk line which will carry the bait to any depth. The effect on the future of angling is bound up with this question. A copper wire is very conspicuous in the water, and although it may suit its purpose at first, it will in time scare the fish and drive them into cover. Silk lines are dyed water-colour, and therefore less noticeable. It is a well-established fact in connexion with English rivers, that trout in process of time become educated and fight shy of old devices, so that new methods must be employed to be a match for the wary denizens of the stream.

The fish I hooked played remarkably well, and although I caught no monsters, two and three pounders give excellent play, and draw as much music from the reel as fish in Irish loughs. There were two other anglers out that afternoon who fished in their own fashion, but returned with empty creels. That I had fared differently was probably the usual luck of angling, although I am disposed to think that the method I adopted had something to do with it. There is no skill in trolling, so that personal merit does not count. They anchored their boat and

bottom-fished all the time. Trolling covers more ground and increase the chances of sport.

To enjoy the real delights of Algonquin Park it is advisable to plan a camping-out expedition. took the earliest opportunity of arranging one. I was fortunate in securing as a guide one of the official rangers, an excellent man, well acquainted with the forest. We had a complete outfit and ample provision for a week's journey. Fish could be caught on the way, but tinned meats had to do duty for game and venison, as shooting was not permitted. The canoe was of the orthodox birch-bark make. built by an Ojibwa Indian, and was a model of cunning workmanship. Its defects lay in its weight. the guide estimating it at 100 lb., but the ease with which he swung it over his head and at the same time carried a heavy pack strapped to his forehead, showed that of things' avoirdupois he made trifles.

Late in the afternoon we started by a Grand Trunk train, and after half an hour's journey arrived at a desolate station, which seemed to have no connexion with anything but the solitary forest. There we embarked on the Corkscrew River, en route for the northern chain of lakes. As the canoe silently, save for the soft splash of the paddle, glided along the narrow stream, I learnt something of my guide's history. It was the outcome of my question: "Where did you get all those feet and inches from,



TRUCT I SHING-LANTING A THREE-POUNDER IN ALGONOUN PARK



Mark?" He was about 6 ft. 2 in., with shoulders in proportion, and all the fat that such a superficial area might claim transmuted into solid muscle. He had inherited a farm as a youth, and with it incipient The damp, low-lying soil threatening consumption. to claim him for its own, he applied for the post of ranger. During the early days of service he had scarcely sufficient strength to cover the tramp through the forest that was assigned him. companions, in true camaraderie spirit, divided up his share of baggage between them, and slowly but surely the new recruit throve and grew until he The forest became to him became a son of Anak. the very breath of life. He revelled in its sights and sounds. A man of liberal education and quick wit. he mastered most of its branches of natural history. knew the name of every flower and shrub, and the ways and haunts of its wild denizens.

If these lines are ever scanned by him, let them be the assurance of my sense of indebtedness for the delightful days we spent together. Mark, I am with you again, shooting the Muskoka rapids, leaping on to the ledge of rock and holding the canoe that you feared was ripped on the shallows. I watch your face as you narrate many a thrilling adventure. I see you turning out and lying on the hard ground to give shelter to the two drenched tourists swamped in their camp on the night of the terrific thunderstorm. I call to mind our last words, our final

hand-grip, that my fingers would not allow me to forget readily . . . and other things that had upon them the milling and stamping of nature's gentleman. Believe me, they are not forgotten.

The Corkscrew River, through which we paddled. by no means belied its name. There were so many turnings that every mile must have been doubled. In places where it overflowed the meadows. Mark would direct the canoe to another bend of the river. which would have taken twenty minutes to reach by the direct course. These overflows were invariably caused by the beavers, which swarmed in the stream. These clever engineers erect dams to hold up the water for their own purpose. For substantiality they were marvellous structures. We had to carry the canoe across them, and had they been constructed by human hands with the same material, they could not have been more firm. Jumping upon them made not the slightest impression. The forest was a good way off the river, and the felling and drawing of timber must have entailed much labour. Some of the wood consisted of good-sized trees. The beavers' capacity for this kind of work is phenomenal. We saw trees 191 inches in diameter, which had been felled by their sharp incisors. The males are said to be the hewers of wood, and the females the builders. The labour is conducted on co-operative principles. above the dam we found their house on the bank. consisted of brambles daubed over with mud so closely

that it was rainproof. A small opening was made in the roof for purposes of ventilation. The domicile was solid all round, with the exception of the ventilation shaft, so that the entrance had to be effected from the river. Callers could therefore only gain access by diving.

In this house the beaver and their young take up their abode. Monogamy is the recognized principle of domestic life. In the case of the death of the female the male is said to espouse perpetual widowerhood. It is not quite clear whether, in the reverse circumstance, the wife reciprocates this touching example of conjugal devotion.

The beaver is well fitted to his environment. Being amphibious, his feet are adapted both for swimming and carrying. The hind toes are webbed, the fore toes divided. There is a double claw on each of the second toes of the hind feet, which aids the animal in dragging the timber to the river. In addition to what is used in construction, a plentiful store of branches is laid up for winter food. When berries and roots are not procurable the beaver lives on bark. They begin to lay in the stock in the early autumn. We noticed high banks denuded of every bit of vegetation and deeply scored by the branches that in a single night had been felled and dragged into the river. The wood was floating near the bank, arranged in an orderly fashion, so that it could not be carried away by the current.

beaver stores birch, poplar, hard and soft maple, black ash, cherry, hazel, and white pine. As a rule there is only a small quantity of cedar and pine stored, although it is the most plentiful of all Canadian woods. The Indians say that the latter contain medicinal properties, and the bark is only used "as occasion may require."

We surprised several beavers in the rivers and lakes. They are quick to take the alarm and dive, swimming thirty or forty yards before showing themselves again. Like all animals, they have their own way of warning their companions and putting them on the qui vive. In the act of diving they strike their tails against the water, which makes a ringing sound that can be heard hundreds of yards away. Their broad flat tails are eminently fitted for the purpose, and the force of the stroke shows great muscular power. As a comestible this appendage of the beaver ranks high in the estimation of the epicure.

The evening shadows were falling on Canoe Lake when we left the river. The day had been hot, and a thunderstorm was brewing. Mark, apprehensive of discomfort, plied the paddle with renewed vigour, making the canoe shoot rapidly through the water. On the western margin the dark pines made fantastic shadows, and the islets in the centre of the lake repeated themselves in inverted forms in its clear depth. The shelter of a hut awaited us on the lake

shore, equipped with all needful camping utensils. A pile of logs lay ready for use, which had been chopped by the last occupant of the shelter, a rule strictly observed amongst the rangers. A man, wet to the skin, and weary after a long march through the forest, perhaps with the weight of a deer on his shoulder, beaches his canoe on the lonely shore. In the cheery blaze of the logs ready to hand, he can at least trace out some sense of human companionship and forethought.

In the small hours of the night I was awaked by the noise of something like the march of a distant army. The contrast with the absolute stillness that preceded it must have aroused me. I had been lying awake for some time obsessed with the silence. The forest was mute, no wave of the lake lapped the shore, nothing but the weird screech of the night hawk as it snapped at the flies in its zigzag flight. could be heard. I kept listening for its return as it took in our resting place in its round at irregular intervals . . . then I fell asleep, to be roused into heart-beating wakefulness. The march had commenced: far off it began, then drew nearer across the tree tops, evoking the deep resonance of the pines, and fell with a crash on the lake, an awful storm! How much was rain, and how much thunder I could not say, the two streams seemed to meet and mingle. supplementing each other, negativing each other. A flash that lit up the open doorway of our shelter in a

yellow framework followed. I saw in it the green of the distant islets, and the glint of the barrel of Mark's revolver that lay close to hand; then the flood-gates of Heaven were opened, and it rained as I have never known it rain. Mark turned over and murmured, "God help the poor traveller!" to which I added a heartfelt "Amen."

The morning broke sullenly, the blue sky was gone, and showers fell at intervals. We started off in macintoshes for a twenty-mile paddle across Canoe Lake, through South Tea Lake and on to Muskoka. I trolled with minnow and natural bait, but did not succeed in getting any trout.

Canoe Lake fishes well during the early part of the season. It yielded one angler a 14-lb. trout, a month before my arrival. These big fish come on the feed in fits and starts. They lie up for several days after gorging. It is when they go on the prowl again that the angler's lure proves so deadly. Canoe Lake and Tea Lake are the highway of the lumbering traffic, and the fish are disturbed a good deal. Unless off the beaten track, one is not likely to find them.

In the immediate neighbourhood there are small lakes which hold good trout. Of these Drummon and Cache deserve particular mention. They are not so much fished, being out of the way, and entailing portage across the forest. A portage has its inconvenience and delays, but an hour's sport on some water is worth a day on others. Guides, for an

obvious reason, do not say much about these places difficult of access, but it is advisable to explore them even at the cost of extra help. Canada is every year becoming more and more the playground of the American tourist, and the most accessible rivers and lakes are being rapidly used up. Verbum sap. !

We reached the mouth of the Muskoka River in the afternoon, where a lumber dam has been erected. There the most interesting and exciting part of our canoe trip commenced. From the lake the river courses down an inclined plane, reaches are traversed where the water flows in unbroken current, but all along the course sudden descents intervene, and the roar of the Muskoka is heard far off. The rapids in such places are not without danger to the canoe. Sharp ledges of rock protrude, which any moment may pierce the thin layer of bark, the only barrier between it and the water.

Mark paddled with consummate skill, and the canoe sped over the seething flood, sinking into the maelstrom of cross currents, each seeking to draw it its own way. Rocking, swaying, plunging in turn, it seemed to hold a charmed life. At incredible speed it bounded over a miniature fall; below it a ledge of rock shot out in menace, and one held his breath in momentary expectation of catastrophe. The prow of the canoe, as if under magnetic influence, seemed to be drawing straight for it, but in response to a touch of the paddle it glided by, and something

like a smothered curse of baffled rage gurgled in the throat of the disappointed Manitou.

It is this sensitiveness to the paddle that makes the canoe such a safe craft. An ironclad requires three-fourths of a mile to turn, and the more a boat draws the slower is the response to oar or helm. The canoe floats light as a swan, and a touch swerves it to one side or another. As long as it is paddled clear of rocks and shallows, it is safe as an ocean liner.

Reclining with extended legs, the craft holds its occupants in a close embrace. In places we came to unexpected gravel shallows, over which the bark shot at high speed. A grating sensation followed, which swept down the legs and up the spine. At such moments Mark jumped on to a ledge of rock or into the water and pulled up in apprehension of a leakage. The delicate bark, although very thin, is exceedingly tough, and when we came to beach the canoe scarcely a scratch showed on the bottom.

The river glides by leafy banks, and the rapids accentuate their clamour against a sounding-board of thickset forest. Below Whisky Falls, the Muskoka is deeper and smoother. It was at that point that grateful libations to Bacchus were deemed appropriate by the old trappers.

The wild life that is surprised along the course is delightfully varied. The wood squirrel heralds our approach with a noisy clatter which more closely



MUSKOKA RIVER. MARK ASCENDING WHISKEY FALL RAPIDS



resembles a bird call. Unseen, he watches us from his leafy vantage in a sense of blissful security. A musk rat dives in front of the canoe, to appear again beneath the shelter of overhanging bushes. The bark freshly stripped from a tree close to the river, shows where a bear has been recently feeding. There is a sharp turn in the stream, which brings a high bank into view. Over it the head of a magnificent buck with wide-spreading antlers appears. We have time to take in as much of the imposing monarch as the brief interval between two paddle-strokes will permit. A doe drinking from the stream gives us more time to admire its graceful form. The snap of the camera shutter is sufficient to give the alarm, and it bounds into the forest, and in a moment is out of sight.

The red deer of Canada is a noble creature. It was still wearing its summer coat, a bay-red tinge, in keeping with the early autumn colouring. During winter snows it turns to a leaden grey, that aids its survival in the leafless forest. It has full lustrous eyes set in a slim head, surmounted by antlers of posterior and anterior projections. It has a long body and slender legs, the greyhound build that aids it in its rapid flight in the open prairie and through the brushwood.

The charge of cowardice in defence of its young has been recently exploded. Its habit of leaving the doe and fawn to the mercy of the enemy is in consonance with the custom of the mother bird which

makes a feint of being wounded and falls on the ground to draw away the intruder from the nest. During the breeding season the doe and fawns have no scent. The buck, on the other hand, retains the pronounced odour by which its enemy tracks it. In company with its mate and young the sensitive ear of the deer is quick to detect danger, and the buck immediately draws off and crosses the track of the enemy, which scents it and goes in pursuit, whilst the mate hides with its young in the thicket.

The speckled trout and Dolly Varden are found in Muskoka River, and unlike the grey species they rise to the fly. So far my artificial stock, which consisted of various patterns, had found no occupation. I mounted a ten-foot cane-built rod, and a gut cast which I judged suitable for rapid water. A small silver doctor and a march brown seemed appropriate to swift currents and circling eddies. The most likely-looking spots were carefully fished, and memories of English chalk streams and Irish spate rivers crowded in as I felt the easy sway of the pliable rod, and watched the flies light with a gentle impact on the stream. It was the first time during my trip that I ventured to apply the scientific method that makes angling such a delightful pastime. fish gave me time for meditation, and I found myself in imagination battling with a two-pounder on a Hampshire chalk stream and hurrying along as quickly as the encumbrance of waders would permit.

I was on the point of landing the imaginary quarry when a red flash in the golden water of the Indian river brought me back to the realities of things. Simultaneously the reel recoiled with a protesting growl, and the rod arched over my shoulders. I was fast in a well-hooked fish.

This trout was an excellent fighter. Wild as his native stream, he rushed and plunged with all the sense of a captivity that was novel. Here was a curtailment of liberty which seemed to offer him freedom, and mocked him when he essayed to take it. This was maddening, and he wildly threw himself into the air. At length came the last shake of his head in anger and he gave in, curving his broad sides in the landing-net with the characteristic orange spots that differentiate the species.

The Dolly Varden has its rising seasons, during which it feeds ravenously. I happened to stumble on one of these. Mark pulled up the canoe, and I set myself to watch the fish's movements. Close by the opposite bank one rose two or three times in succession. Would that cunning creation, the floating dry fly, interest him? I wondered. It is little known in Canada, and less used, except on club water.

I mounted another cast, and tied on a Wickham fancy. That that pattern should be selected was a concession to weakness. The silver doctor had proved the killer with the wet fly, and a Wickham was the

nearest thing to it in dry entomology. It was an o size and unannointed, for like the foolish virgins I had brought no oil with me. I whipped it through the air in the direction of the rising fish, and a couple of casts brought it on the exact drift. With perkily erect wings it floated onward, and the moment it covered the fish it disappeared in an accomplished break, as if the Muskoka trout was an old practitioner in the floating fly business. On tightening up the line, the usual resistance followed, and in due course the fish was creeled. I got five handsome trout and lost two or three more. There were some nice pounders amongst them. Above two pounds weight, they do not seem disposed to patronize the fly.

The lumbering industry has injured many of the Canadian trout streams. The periodical floods caused by the opening of the dams are most injurious to the trout fry, and the great log rafts that are floated down the river scrape the spawning beds and destroy the ova. The buying out of the lumbering interests in Algonquin Park will have a beneficial effect on the angling.

We camped that night in a shelter on the banks of the river. The weather again mended, and the sky cleared. Hungry as hawks, we sat down to our evening meal of trout fried in the ranger fashion, an art in which Mark was an adept. Whilst the light still lingered I watched the beavers in the river,

busily scrambling up and down the bank. One of them lashed the water with his tail so palpably that I looked up and down for the cause of the disturbance. Soon I heard the soft dip of a paddle, and a canoe came in sight. It held two campers, wet through from the previous night's storm. Their canvas tent had been deluged and their blankets and clothes soaked through. They were Americans. With praiseworthy self-denial, Mark vacated his bed in their interests. More fish was fried and the fire repleted with logs. Around it stories were told of Chicago and New York, Rockies and prairies, and much incense was offered to my Lady Nicotine.

I wandered out under the stars and again listened to that mysterious negative, the silence of the forest. The river flowed without a murmur, and thoughts flashed over continent and seas to dear ones far away. For the moment I was no longer in Canada, but by a favourite river and close to a farm homestead. Why, there was the howling of the dogs . . . dogs . . . farm ... surely ... "Mark, Mark!" I cried, hastening back to the hut. "what's that howling?" ranger came out and listened, "Wolves, sir; ah, the devils!" For in a moment the howling burst into a chorus not a hundred yards beyond the river. Then followed a charge and snapping of twigs and a mad rush through the forest. They were after the deer. We listened to the venomous cry until it died away in the distance, leaving behind the intense

silence, and a strange look of disgust on Mark's good-humoured face.

In the light of the burning logs the ranger told us many a story of the cunning and treachery of that subtle beast of the forest. The advance of civilization into the North-West, and the introduction of the repeating rifle, have cowed the American grey wolf. Previous to their advent there are well-anthenticated cases of travellers and trappers falling a prey to their ferocity. All the instincts of devilry are still there, and it needs only the occasion to stimulate them into activity. The abundance of deer and other animals in Algonquin Park supplies them with ample food, and they keep out of sight as if they were aware that a price was set on their heads. The £3 offered by the Government is, however, rarely earned.

In the winter, hunger, supervening on the scarcity of food, emboldens them, and one or two fall to the rifle. The attempts to trap them are rarely successful, and they are suspicious of the poisoned meat distributed through the forest, and generally eschew it. In the depths of the snow baited spring traps are set for them, but only on rare occasion are they caught. Mark told us how he had smeared every portion of the ironwork with fat in the hope of deceiving them. Evidence that the bait was noticed was indicated by the tracks all round it, and even the snow was scraped away from the buried chain and the grease licked off. Smooth patches showed where

the wolves sat as if in solemn conclave to discuss the risks. Retreating marks equally showed that they were not disposed to take them. They even left their cards as close to the bait as possible, as if past masters in the art of studied insult. Sometimes after taking poison they are said to have the capacity of ejecting the contents of their stomachs. This I imagine is assumed rather than proved, and has for its basis the fact that the poisoned meat is taken away, but the dead wolf is nowhere to be found, although a wide search is made for him.

Wolves are fleet of foot, and can run down deer in the forest. The safety of the latter lies in reaching the lake and taking to the water. The wolf does not care for swimming, and the deer can easily outdistance him. In winter, when the snow is thick and the lakes are frozen, he has the advantage of his prev. His short legs do not sink as deeply in the snow as the slender limbs of the buck or doe. The treachery of the animal is one of its worst phases. Although it rarely makes an open attack on a traveller of recent vears, it has been known to pursue him for miles, generally travelling in packs of four or five for this purpose. The ranger going back on his track can trace all the brutes' movements. Where the man stopped for a few moments, they stopped, then took up the trail again, but never showing themselves. Had faintness or accident overtaken the man, the beasts would have been upon him in a moment. When

trapped, they ape docility to a dangerous degree, but if their captor is off his guard a sudden spring at his throat follows.

The grey wolf grows to a height of 28 inches, and is from 4 to 6 ft. long. It weighs 60 to 100 lbs. The next day we travelled by canoe about 16 miles through rivers and lakes, skirting the forest, but we saw no deer. The wolves of the previous night had driven them out of the district.

CHAPTER V

En route for French River—Pickerel Landing—The house on the rock—Primitive simplicity—The fate of the skunk—The Ojibwa Indian guide—Reversion to original type—Whisky and deterioration—French River—Recollections of Champlain—Trolling for bass and pike—A master of the knife—A fight with the "tiger of the river"—Gaff versus rifle—The indefatigable guide—The might have been—In camp—The note of the whipoorwill—"The fretful porcupine."

THE Canadian Pacific Railway has recently been extended to Sudbury, the centre of a large mining industry. It has opened up a hitherto unexplored area of river and forest. For fishing and shooting it is one of the best districts in the Ontario Province. I travelled to Pickerel Landing which accurately describes the situation. It is nothing more than a landing, with not even a platform attached, to say nothing of a station. For primitive simplicity and the complete negation of all luxuries it can scarcely be surpassed. I scrambled out of the train, encumbered with fishing rods and other impedimenta of the chase, and climbed down to the railway track. Below it a magnificent river swept beneath the bridge, and in the midst of the river

there was an island with a wooden habitation perched on a high rock. This was Wanikewin, or the "house on the rock." To do it full justice it was the hotel whose hospitality stood between me and starvation, and destined to provide guide, canoe, and all the paraphernalia of a camping outfit.

The moment the train moved off on its northern journey, leaving my solitary figure in more emphatic relief, a boat was pushed off the island, and the quick flash of a paddle assured me that I had been discovered.

Wanikewin as an achievement of civilization was only a degree removed from the general desolation of the place. It was a wooden structure, through which the wind whistled all day, and at night the music incidental to somnolence in one apartment could be heard in all the rest. The chance rambler outside the precincts was by no means cut off from any advantage that this primitiveness conferred. There was not a glass window in the house. A mosquito net closely nailed to an opening did duty for that. It succeeded in keeping out the winged pests, but not the rain, which forced its way through the network during the night. So near was the whole thing to the heart of nature, that the skunks claimed a right of entrance, and had to be shot. A beautiful specimen underwent that fate half an hour after my arrival, which insisted in making a storeroom a nesting-place for her young.

If this description of a hostel, which is not exaggerated, is likely to deter any sportsman from going to Wanikewin, let me assure him that of the places that I visited in the province, it was one of the most charming. The crude structure possessed all the conveniences that an explorer might desire: a post-office for dispatch and delivery of letters; a store amply provided with provisions; camping tents of the latest and most comfortable design; canoes adapted to all the exigencies of the rivers; Indian guides, true children of the wilds; and a motor boat to shoot up the river and reach the nearest portage through the forest where human footsteps were almost unknown.

It is because this primitive simplicity is all too rapidly disappearing from Eastern Canada, and the modern hotel is taking its place, that one involuntarily exclaims, Oh, Wanikewin! keep thy wooden walls, thine unglazed windows, thine odorous skunks, and untutored Indians, and we shall love thee all the better!

It was something to be handed over to the charge of an Indian with royal blood in his veins. Ellick, my guide, had that particular distinction to commend him. His father, a chief of the Ojibwa tribe, died twelve years ago. The heir-presumptive to a disbanded kingdom possessed all the solemnity of a fallen magnate. He would sit on a ledge of rock, and look out across the surging river as if awaiting

the summons to emancipate his tribe from the thraldom of civilization. It was interesting to try and discover what survived of the original qualities of the redskin. The preliminary survey of dress was not encouraging. A pair of heelless boots and patched nether garments, had little suggestive of the buckskin moccasins and buffalo robes garnished with porcupine quills. An old planter's hat was a distant remove from the erstwhile coiffure of golden eagles' feathers.

But there was reversion to original type despite this sartorial vandalism. The Ojibwa temperament was there, and showed itself on the least provocation. The pensive face, with beady lustreless eyes, became animated under excitement. In motion there was a stealthiness in Ellick's tread, which pointed to an hereditary connexion with the chase, a grace of carriage suggestive of nomadic ancestry. When the canoe silently drifted round a bend in the river and surprised a buck slaking its thirst, the Indian's nostrils would quiver like those of a staghound held in leash, as the quarry dashed into the forest.

The North American Indians are now confined to Government reserves all over the Dominion, where they follow pastoral pursuits and engage in different forms of labour. They still shoot the deer, trap the beaver, net and spear the salmon, and as these pursuits are regarded as essential for food, and were enjoyed by them in practical monopoly, the

Indians are granted a great deal of licence, and the close season is not enforced. In their unsophisticated primitiveness they make excellent guides, their knowledge of rivers and forests being invaluable. Close contact with civilization does not always improve them, and under indulgence they grow indolent and inefficient. Their introduction to the bottle by the white man has marked a stage in deterioration so distinct that it is now a penal offence to give them ardent spirits. Unfortunately this law is ignored by many sportsmen. On one river where they act as guides I heard it said that the Indian will go as far as the whisky-bottle lasts. Another deduction may be drawn from a saving. common in regard to them, "The Indian who can speak the English language is a bad guide." You are frankly told that you must have ignorance or inefficiency. On the occasions when I employed them, I found them both interesting and efficient, and in two instances they could not speak English. beyond a grunt meant for "yea" and a headshake for "no."

Ellick was a case in point. His gesticulations and the emphatic use he made of one or two words, were eloquence in themselves, and his quickness in understanding my wishes and complying with them left little to be desired.

When one remembers the habits and customs of the race from which the Indian sprang, there is little surprise at the great change that has taken place in his spirit and temper. The wild child of Nature, unrestrained as the mountain torrent; savage in instinct, with no law, but a law unto himself; consigned to the rules and restrictions of modern civilization, as he has been; is it any wonder that his nature should chafe and deteriorate? The ample provision for his needs in itself made for deterioration. The rifle in exchange for the bow, the shack for the wigwam, the purchase power of money in store and saloon; all this, so contrary to the environment of the rugged mountain, the entangled forest, and the struggle for life they imposed, civilized the North American Indian, and at the same time inaugurated the rapid extinction of the species.

A short portage brought us to French River. It is high above the level of Pickerel and narrow where it debouches into it, broadening out again as progress is made up-stream. It probably differs little from the river which Champlain descended two centuries ago. History records how he pressed his way across land from Lake Nipissing and struck French River after exploring the Ottawa. Working his way down-stream, he found a tribe of naked Indians gathering berries on the island rocks. They were Ojibwas, the tribe to which my guide belonged. With the exception of an occasional trapper or lumberman, few Europeans have since shot its rapids or camped on its banks.



ANGLING ON THE FRENCH RIVER, ELLICK, MY OJIBWA GUIDE



As Ellick paddled the canoe up-stream, I mounted two fishing-rods, one with a spoon bait, the other with a Devon minnow, and began trolling. In a short time, several small-mouthed bass were landed, the largest of which we kept. A reach of the river fringed with weeds yielded a couple of wall-eyed pike, which took eagerly, but were returned to the water as undersized. Mounting larger spoons, two or three pound bass seized them, to the huge delight of Ellick, who had probably never seen fish caught with anything more scientific than a handline or spear.

The maskalonge is the chief game of the French River. It closely resembles the pi'ce in appearance and habits. The shape of the head is flat and elongated, and resembles that of the Esox lucius, although larger in the mouth. Its body is thinner in proportion to its size, and the fish is capable of equally rapid motion through the water. The colouring is dusky grey, with none of the bar or spot markings distinctive of the pike. Like the latter, the maskalonge is predatory in its habits, a veritable highwayman of the stream. On the margin of weeds it lurks, its colouring matching the river flora, or contrasting in a way equally deceptive. master in the art of mimicry. The long, thin body changes in tint with the variegation of the weeds. In the spring it is a lighter colour, in keeping with the early verdure, becoming darker as the season

advances, and in the winter, when the weeds are dying off, there is another change in consonance with its environment.

The maskalonge, like the pike, has its special feeding times, and one may fish for days without getting one of the large specimens, which gorge themselves and lie up until hunger sends them on the warpath again.

It was August when I fished for them, which is said to be one of the worst months for angling. The current opinion amongst Canadians that the maskalonge shed their teeth that month, is not generally supported by ichthyologists. It is contended that the phenomenon has its analogy in the deer shedding its anthers and the snake sloughing its skin, Fish, like grayling, become very soft in the scales when out of season, and are in the habit of casting them, but stiffen up again during the autumn months. Counter arguments might be raised against all this. Very old fish lose their teeth, no doubt, through senile decay, and possibly the discovery of some toothless maskalonge has given currency to the belief.

Two or three times I thought I had got hold of this tiger of the river, but the vigorous plunge and bold dash was caused by a pike of more than average size. Clearly, the maskalonge declined to be rushed, and we had to bide its time. Meanwhile, Ellick paddled slowly and patiently up-stream.

The French River broadened out to a mile in places, and disclosed magnificent bays bordered with pines Its course was a complete puzzle. and tamaracks. There were a number of these expansions in every reach, in places biting into the forest for half a mile, then sweeping round overlapping islands. It was a maze to all but the experienced boatman. I found myself speculating on the true course amongst the openings, but unsuccessfully. Sometimes it lay to the right, at others to the left, a sharp turn here, a forward and back there. But Ellick never erred; true as magnet to the pole, his native instinct guided him. Often I thought he was caught napping, as we found ourselves in a cul de sac, but the Indian had made a détour, and a big mellifluous voice, eloquent in the Ojibwa tongue, would whisper, "Lunge," "bazz," softening the sibilant into the music of the mother tongue. "Big rock-bazz," and sure enough as the spoon drew near to the granite cliff, the reel would scream, and high out of the water the bass would spring, made captive by the bait.

Higher up the river, the forest became less dense, and there were occasional clearings, probably the effect of winter floods, where the river overflowed and drowned the trees along its banks. In the background they showed again, massed in unbroken phalanxes. Crowned with dwarf pines and poplars, island rocks stood forth in midstream, their white quartz seams clearly showing, and their fissures

green with the seeds that had found foothold there. An occasional Norwegian pine towered from the bare bank, proudly proclaiming its victory over the flood that had swept away its less hardy fellows. Its roots had struck too deeply to be moved by wind or water.

We had luncheon on one of the islands, where my Indian guide showed a rare genius in the culinary art. A few slashes of an old knife with a villainous look about it suggestive of other uses, removed the backbone of a bass and pickerel. The deftness of the strokes showed an inherited aptitude for scalping, becoming the son of a chief. Soon the blue smoke of the kindling logs rose from the island, and with it the odour of delicious viands, bass, pickerel, tea, fruit. Here was ambrosia, the very food of the gods waiting on little less than fiendish appetites. Oh, what a luncheon!!...

Towards evening I had expectations of a fight with a maskalonge. We had caught bass, small-mouthed and large-mouthed, and a rock species with little fight in it compared with the others. But what a handsome fellow he was, with deep blue eyes and carmine irises! A dorsal fin exceptionally large with eleven rigid rays and eleven soft. Underneath there was a fin with six rigid rays and eleven soft. Beneath the throat the pectoral fins met in a fanshape of artistic design, with five rigid rays in each. All these trimmings surmounted by a head and body

BLACK BASS FISHING

of golden green. But "handsome is as handsome does," and the rock bass was a poor fighter. The cook holds a different opinion of his merits, and not without good reason.

The best pike, a fish of 91 lbs., took a fancy to a large spoon bait intended for his betters, and gave the liveliest play so far. Then a long and uneventful paddle in an atmosphere without a breath of air. There was a violet haze on the water, and nothing broke the stillness of the smooth-flowing river but the regular beat of the Indian's paddle. The rods were set athwart the canoe, a 31-inch spoon on one and a large Devon minnow on the other. It had been a long day, and as there is only one position possible in a canoe, I was getting weary. The close atmosphere and the smell of the pines began to have a soporific effect, and I closed my eyes. The swi-ish ... swi-ish, the regular beat of the paddle, grew fainter and fainter . . . swi-ish . . . ish . . . oblivion.

"Lunge! lunge!" cur-r-r. These were the combined noises that awaked me, comprised of Ellick's loud cry of "Lunge!" and the crescendo scream of a 4-inch pike reel revolving like mad. Far away, the line was cutting the water with a hiss. There was no mistake this time—I was fast in a maskalonge. I seized the rod, whilst Ellick reeled up the other to avoid entanglement. The big spoon had done the business, seducing the tiger which had gone forth on his evening prowl.

I had no fear of the rod, which was a stout green-heart of carefully selected timber, and specially made for large salmon. The line was finest silk, and the spoon mounted on gimp that could not be readily cut with the fish's formidable teeth. It was a question, therefore, of firm hooking and careful handling. The moment I applied pressure to check the run, the fish turned and took a slanting direction. Ellick paddled towards him, and I recovered about twenty yards of line. More pressure set him off again, with a pace equal to a salmon's, which ended with a break on the top of the water, disclosing his full proportions to our admiring gaze. Another pause followed, with more paddling and reel winding. So things progressed for some time.

The maskalonge's method of fight is cunning. He makes rapid runs in the effort to break loose, then rests almost on the top of the water. This gives him breathing space, and when the canoe approaches him he is off again as vigorous as ever. In this particular he differs from the salmon, which only comes to the top when absolutely exhausted, excepting, of course, Salmo salar's lordly springs. How far he might alter this method if played with a hand-line, a method all too common in Canada, I do not know. It is possible that the firm pressure of the rod brings him up. The spring salmon of British Columbia keeps steadily on the move, with only an occasional dash, and in that way reserves its strength. The maskalonge

exceeds pike and Canadian salmon in speed, but the runs are short. By such a method the fight is much prolonged. My captive leaped out of the water a couple of times, and acquitted himself in such sporting style that I share the high opinion he has earned amongst anglers.

It is not easy to play and land a fish from a canoe which is in danger of capsizing if there is more smile on one side of the face than the other, so that when the stage of exhaustion was reached, Ellick ran me ashore, and I gaffed the prize. I did not call in the aid of a rifle or revolver to assist in the process. Judging by angling literature and common report, this is the usual method of putting an end to the maskalonge's struggles. It is, to say the least, a most reprehensible one, and those who practise it can scarcely be regarded as true sportsmen. Angling is a pastime, and regulated by reasonable rules. To supplement a rod by the aid of a rifle is not playing the game; it is only using dynamite in another form.

My captive was over 10 lbs. weight, small, no doubt, compared with the monsters to be met with at times, but he was a fair sample of the species, and if those twice the weight play in the same proportion, then the maskalonge is a fish to be respected.

We camped high up on the bank of the river, Ellick pitching the tent on the borders of a clump of pines. As I watched his sober face in the light of the fire, I wondered at his powers of endurance.

He had been paddling all day long with the exception of the short luncheon interval, carrying the stores and canoe over steep and rocky portages, varying the proceedings by chopping logs, cooking meals and erecting the tent. A worthy son of that hardy race of Indians who prided themselves in their strength and won their chieftainship by endurance. It was such youths who entered the lists and competed in those ordeals that once comprised the ritual of his Had the march of civilization in the North-West continent been stayed or diverted, his physical powers would in all probability have been displayed in the long-imposed fast in which the gift bestowed by his guardian spirit was sought. He would have gone forth to fight unaided the grizzly bear or climb the war eagle's eyrie to win the "medicine" talisman Ellick's hardihood even essential to his career. suggested an endurance of the most exacting rite in which the "brave," with skewers driven through the muscles of his arms, was suspended in mid air until a merciful unconsciousness deemed the test sufficient—a custom no doubt often practised on the banks of that river where we had pitched our camp.

The fast-waning light which hung over the scene passed into dark, without the intervention of a gloaming. The camp fire flickering on the trees only served to make the darkness visible. Porcupines emerged from their hiding-places in the wood, loving darkness rather than light. A wild duck's brood

that our canoe had scattered were re-gathered from amongst the river sedges by the eager quacking of the mother bird. The musical call of the whipoorwill evoked answers from the very heart of the forest:



The notes, oft repeated, still remain with me. Ellick had spread a bed of balsam beneath my blankets. It is a species of pine where the needles run in straight lines, and do not prick or become bulky. There is an aromatic odour about it which is delightfully pleasant and said to be soporific, a medicine wholly supererogatory as far as I was concerned. I had scarcely put my head down when I was off.

How long I slept I know not, but I was awaked by a sound like a stick drawn sharply round the canvas of the tent. "What is it, Ellick?" I asked. There was a feeble answer in which I caught the first and last syllables, por—pine. Porcupines! The Indian had taken the precaution to bring our provisions into the tent. But in the morning I learned that, to get at the food at the head of Ellick's bed, they walked over my person, and returned by the same route. I neither heard nor felt them. It may have been the effect of the aromatic balsam, but an earthquake would not have disturbed my repose.

CHAPTER VI

Lake of Bays—Fairy Lake—A honeymoon island—A smothered waterway—Mary Lake—The searchlight—Wawa Hotel—The "Joe" pleasure tug—Memories of Bigwin—A triplet of graces—Savage Den and its "chief"—Auld lang syne—Hollow Lake—Trout-fishing on Raven Lake—North Bay and Temagami; Facilities for colonization, The Forest Reserve, Angling rivers and lakes, The Land of Hiawatha.

RETURNING from Pickerel and French River, the Lake of Bays is reached by Parry Sound. At Huntsville there is a small steamer that plies on the lake. It is a favourite summer resort, and the Grand Trunk Railway supplies a good service from Toronto and intervening towns.

The "Lake of Bays" might with equal propriety be called the "Lake of Lakes," for it is in reality a series, one leading to the other with the exception of a narrow neck of land on which there is a railway portage. The convolutions of these lakes produce an effect most picturesque and romantic. The steamer, passing under a drawbridge, enters Fairy Lake, which by no means belies its title. It, like most of its fellows, is a mirror framed in an unbroken margin of woodland. An island called the Scotchman's Bonnet is a favourite honeymoon resort. There





is a house on it, the only one on the lake, which shyly peeps through a tangle of balsam tamaracks and the closer foliage of the sugar maple. My first view of this exquisite spot gave the impression of being the finest forest and water scenery that I had ever beheld, and in the ten thousand miles I travelled I saw nothing more beautiful.

The steamer, which to the uninitiated seemed to be heading recklessly for a leafy bank, gave a sharp turn, and a foliage-smothered waterway opened up before us. So unexpected was our approach that the prow of the steamer ran amongst a flock of wild duck, which rose in alarm and with rapid stroke of wings flew off, loudly protesting against this rude invasion of their sanctuary.

Mary Lake is a two-hours' sail from Huntsville Peninsula, with a railway portage lying between. It was late when we started, and the night fell suddenly, enveloping all the beauties that evening unveiled. The searchlight of the steamer made a vivid path across the lake. Its restless rays swept the water, focusing a leafy island, disclosing a dangerous reef, as if exposing its sinister intent, and calling on the pilot to beware. The border of the lake, far off, was picked out against the dark trees, and the patches on the bare rocks, made by the lapicida lichens, came into view. At length the landing-stage was discovered, and all its detail, including a peach basket with red netting, suspended

on a girl's arm. The Wawa Hotel was the destinanation of the pleasure craft. There all the comforts of modern civilization awaited us. A wide hearth on which the glow of a log fire flickered; a commodious lounge room, where parties, segregated in groups, talked in the familiar American tongue. In corners, more remote, there were couples who whispered secrets not intended for public ears; and scattered units content with the inferior fellowship of pipe or cigar. Next day, through the courtesy of Mr. C. O. Shaw, of Huntsville, manager of the lake steamers, I went on an exploring trip on the "Joe" pleasure tug, in company with its cheery captain. We soon got off the beaten track, and traversed beautiful sweeps of water, skirting islands and rocks. Behind us the "Wawa" looked no bigger than the wild goose which its Indian name implies. Bigwin Island, where the Algonquin chief had no doubt often shot the bird in question, is a conspicuous object. Fairview and Belle Vue are beauty spots in the scene, and the islands of Faith, Hope and Charity are near enough to salute each other at sunrise, as gentle graces should. I landed at Savage Den. and enjoyed the delightful companionship of its modern chieftain, the Rev. Edward S. Young, of Brooklyn, who has established for himself on the Lake of Bays a local habitation and a name. insisted on gillieing me in quest of trout, for which we trolled. He holds an enviable record amongst

BOATING ON MUSKOKA LAKE



anglers for his prowess amongst the big denizens of the lake. Like many Americans, he has obtained a freehold on one of the islands, where he has built a house and spends his vacation with his family every year. I had luncheon with them; and the charming hostess and sweet children, like buds of honeysuckle entwined amongst fuller bloom, made a group not easily forgotten. We all nibbled green corn like rabbits, and a few hours later, when the "Joe" took its solitary passenger away and the landing-stage began to recede, the notes of "Auld lang syne" rang out in the best of all impromptus, a heart overflow, until one voice cracked with—well, a high note!

I had still to make acquaintance with the resources of this section of Georgian Bay, and returned later in the season, when the Wawa tourists had taken wing, and Savage Den no longer held its merry party.

Dorset is the best centre for angling, and making that my headquarters, I spent a few pleasant days there. Hollow Lake is one of the favourites. It is an extensive stretch of water fed by many streams, where speckled trout, as well as the lake species, are plentiful. In the shipping office at Huntsville I saw a cast of one taken, thirty-one inches long and nine inches deep, which is as large a specimen as is likely to be caught anywhere.

A storm raged on the morning I proposed fishing in Hollow, and a smaller and more sheltered piece of water had to be selected. Hollow is six miles' portage

from Dorset: Raven was only four. The former has boats and gillies on the spot; the latter, on the other hand, entails freightage of canoe and tent, as there is no hotel accommodation there. Whilst this is inconvenient, it also constitutes an advantage. With the growing popularity of the resort, the fishing is not likely to improve. It is not merely the number of fish that are caught that affects the angling, but other pastimes interfere—canoeing, bathing, etc. wash of steamers is a potent disturbing element that puts fish off the rise. A distant lake entailing portage is preferable, other things being equal. To get there is, however, not always practicable. Labour is scarce in Canada, and proportionately dear. At times neither love nor money can procure it. not superior airs or graces that limit the supplythere is none of that. It is simply that those who might be employed have something else to do. In one case, when engaging a man that was a skilled angler, the arrangements were complete, all but fixing the time. When I mentioned it, he exclaimed, "Oh! I am sorry, I cannot go that day. I have to attend a meeting of the Telephone Company, of which I am Chairman." The substitute I obtained at the same rate—12s. 6d. a day—was the owner of his house and grounds, and had been a successful mine prospector. He was willing to carry a canoe and baggage nearly three miles over a rough trail which rose to a height of some hundreds of feet above

sea-level. I confess the bearer equally rose in my estimation. The value of the superior workman is soon discovered. The angler finds in him a companion as well as a servant, generally a well-informed man, and an ardent fisher. Every reasonable duty is scrupulously discharged, and he supplies a supreme example of the dignity as well as the efficiency of labour.

High up on the trail, we got a glimpse of Raven Lake, lying beneath us. Autumn footsteps had already made rapid strides in the forest, and the red of the maple was spreading like a fire amongst the green. We stopped to catch mud minnows, which, mounted on a small spinner, are the best bait for trout. They are found in pools almost stagnant, and have close-set gills like eels, which give them greater vitality out of water. This provision adapts them to their mud environment, and accounts for their survival. Bundled carelessly into a tin vessel, they will live for hours, a feat impossible in the case of ordinary minnows. One mounted on a spinner is good for catching several trout, owing to the toughness of the skin.

Raven Lake is three miles long, and consists of several expansions with connecting rivers between. We launched the canoe from a gravelly beach, fringed with coarse bent grass, which gave good cover for water-fowl. The gillie hugged the shore, which is the best place to find a trout as the season

advances. During the hot months they take to the cool depths, emerging after dark to hunt for food on the shallows. As the weather becomes cooler they return to lighter water. There the temperature is more to their taste, as trout do not like extremes of of either heat or cold. The weather changes in the early autumn, and there is a decided fall in the thermometer. Handling the wet line chilled my fingers painfully. The smaller fry on which the trout feed take to the gravelly shallows as summer advances, and the trout follow them.

During the morning hours we failed to find them anywhere, and with the exception of a couple of small fish the creel remained empty. After luncheon the temperature improved, and with it the sport. The trout came on the feed, and the rod bent and trembled beneath the struggles of one-and-a-half and two pounders. On one reach they kept breaking the surface of the water, and I tried to induce them to take a fly, but all such overtures were unavailing. They were not feeding on surface food, but simply gambolling, as fish do, and in such a humour ephemeridæ do not interest them.

It was getting dark when we left the lake, by no means dissatisfied with the results, allowing for the fact that it was late in the season. Raven would, no doubt, afford splendid sport in May or June, when trout feed much better. A month earlier, I looked into the well-lined creel of an angler who had paid it

a week-end visit. It held a couple of trout that must have been close on four pounds each, and five and six pounders are by no means an exceptional take.

Nearly 300 miles north of Toronto lies North Bay, the southern terminus of the Temeskaming and Northern Ontario Railway. The enterprise marks a new departure in nationalization, as the Ontario Government owns and works the line. It is controlled by a commission.

I spent a delightful day in the fruit country of Norfolk with Mr. Engelhart, the Chairman, in company with Col. Matheson and Mr. A. C. Pratt, of the Ontario Government.

The Temeskaming and Northern Ontario Railway was undertaken in the interests of colonization, and the progress that has been made during the short time it has been opened justifies the project.

In the official report ending October 31st, it is shown that the line consists of 252 miles of rail, with a revenue of £318,370, worked at a cost of £87,226. But that the venture has not unfavourably affected the ratepayers is shown by a profit of £84,000, paid to the Government Treasurer.

The number of passengers in five years increased from 573,000 to 2,800,000.

The effect of these facilities for colonization is shown in the growth of towns along the new railway track. The same features are seen in connexion with the Canadian Pacific, the Grand Trunk, and Canadian Northern, which are linked up with the new Government line. The population of Temeskaming in six years has increased from 2000 to over 50,000. Similar development has taken place in Temagami, Engelhart, and Liskeard. Where there was nothing but a wilderness and the absence of life, other than the fish in the streams and the big game that wandered unmolested amidst the wild grasses and cover of the forest, there are now farm-houses, hotels, and the general features of civilized life. Were it not for the convenience of these travelling facilities, one would have a grudge against railway enterprise, which so soon transforms the primeval forest and primitive simplicity into comfortable habitations and the luxuries of conventional life.

The Government has followed up railway extensions with the establishment of normal schools at North Bay. There, 600 feet above sea-level, in a pure and invigorating atmosphere, the youth of the colonists enjoy all the advantages of a fully equipped educational system.

The railway runs from North Bay through rich agricultural land, ultimately reaching Cochrane over 1000 feet above sea-level. Woodlands, Widdefried and Muloch are traversed en route. Nipissing and its mines, French River and Georgian Bay with its fish are in turn exploited; opening up to the tourist the fleeting joys of sport and to the settler the more solid opportunities of lucrative industry.

The Canadian Pacific, the Grand Trunk, and the Canadian Northern open up further tracts of this interesting country.

It was along the great waterway of Temagami that Brébœuf travelled to Lake Huron, intent upon his mission to the Indian tribes. An extensive Forest Reserve conserves all the primitive conditions of wild life with which the district abounds. The town of Temagami has undergone the oft-repeated miracle of Canada—the metamorphosis of desert into civilized life. Its forests and chain of lakes set in margins of pine and tamarack have become magnets in drawing the busy merchant and professional man to the enjoyment of its cool climate and exciting sport. As I traversed the district, I found myself drinking in the fine air, which acted like a tonic on the exhaustion incidental to a fatiguing journey, and looking at its lakes with that thrilling sense of expectation which lovers of the gentle art feel.

The lighter water found in many of these lakes supplies the essential condition to bass fly-fishing. There is no need to spin in half a fathom deep with a heavy sinker, which destroys the fighting power of the bass, and which after a time robs fishing of much of its zest. Donning a pair of waders, and carefully stepping along the shore, a fly can be landed amongst the boulders that make dark shadows on the water, and the bass will pounce upon the ephemera. Then the reel recoils as the quarry

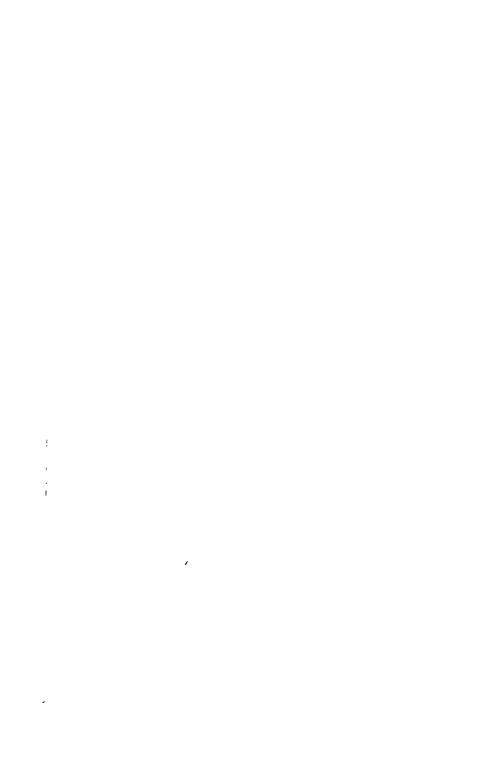
makes a bold dash for liberty to the tune of accelerando crescendo.

I have fished the outlet of a lake on one of the hottest summer days. Wading with the temperature at 100 degrees in the shade is simply delightful. The water was smooth as quicksilver, with a light upon it that dazzled and flashed almost to blinding point, but the cool that lapped round the waders constituted a temperate zone that extended to the rest of the body. One would no more think of fishing for trout under such circumstances than of flying without an aeroplane. English trout on such a day would bury themselves in the weeds or skulk under a bridge or bank; yet, strange to say, the black bass rose with the greatest freedom. A small silver doctor, a Jock Scott and other patterns attracted them repeatedly. Some creeled were over 2 lbs., and all proved to be hard fighters.

This characteristic of the bass is most important, as the tropical weather in Canada exists to a dumping degree, and to enjoy sport and keep cool at the same time, combine the maximum of mercies that one can hope to enjoy in this present evil world.

In the deeper water the big lake trout make their haunts, and to have a tussle with them the flies must give place to the spoon or minnow. With a hundred yards of line and a light trolling rod, it is not difficult to get on fighting terms with them. They run to a great size, and it is possible to find lakes where they

GEORGIAN BAY BLACK BASS



are so unsophisticated as to be ignorant of any kind of angler's lure,

I met two young fellows who exhibited with boyish delight their tackle. They were provided with a camp and canoe, and their plan was to get high up on the chain of lakes and paddle from place to place. This is an admirable way of spending a holiday and getting "far from the madding crowd," which is to be found in the beaten paths of Temagami as well as New York or Toronto.

There are other features of New Ontario which are calculated to attract settlers. Those in quest of agricultural projects have a wide field to choose from, over 12,000 miles from east to west and an area of Those intent on carrying 140,000 square miles. away lasting impressions of magnificent forest and lake scenery can find material for the reflections of a lifetime. The literary man will be face to face with memories of Hiawatha. The Ojibwa Indian that paddles his canoe or with silent tread guides him through the pathless forest, belongs to the tribe of that legendary hero. Mr. Schoolcraft, in his "Algic Researches" and in his "History, Conditions, and Prospects of the Indian Tribes," gives the form of the tradition, as recited by an Onondaga chief, and the transatlantic poet set it to the music of an immortal epic, which will always remain fragrant:-

> "With the odours of the forest, With the dew and damp of meadows.

102 THROUGH CANADA

With the curling smoke of wigwams,
With the rushing of great rivers,
With their frequent repetitions,
And their wild reverberations,
As of thunder in the mountains, . . .
From the forest and the prairies,
From the great lakes of the Northland."

CHAPTER VII

"Westward Ho"—Orangeville—Owen Sound—Through the Great Lakes—Associations of Lake Huron—Brébœuf's mission to the Indians—Feast of the dead—The wigwam life—Indian superstitions—Folklore—Diabolical tortures—Honour—Indian creeds—Loyola and his followers—Heroism of the Jesuits—Painted devils—Joques—Massacre of Brébœuf and Lalemant—Failure of Jesuit mission—The passing of the Iroquois—Lake Superior—Picturesque rapids—The largest lock in the world—Sault Ste. Marie—Lake trout—Fishing resorts—An inland sca—The Rideau River—Nipigon and its trout—Patrol stations—Traffic on Lake Superior—Thunder Bay—Port Arthur and Fort William—Change of the clock—En route for Winnipeg—The opening page of the book of the prairies.

EVERY tourist to the Dominion aspires to visit the Far West. It is the New Canada, magnificent alike in grandeur and potentialities.

The Canadian Pacific Railway offers alternate routes. One is by rail all the way, which takes about a week; the other by rail and lake, which extends the journey to three additional days. In the former case the route lies north of Georgian Bay, Lakes Huron and Superior. In the latter the line terminates at Owen Sound, and thence the journey is by steamer through the Great Lakes to Fort William, where the railway course is renewed. It was this route I

selected. Although it prolongs the journey, it affords a break in the long transcontinental trip, and the land-locked seas that are traversed are the most wonderful on the American continent.

Between Toronto and the port of embarkation there are many points of interest. At Orangeville there is evidence that the far-off West is not the only grain-growing area. Huge elevators show active farming interests. The wide valleys, sloping away from rising plateaux, yield heavy crops, and the timbered stretches in close proximity to natural waterways foster the lumbering trade. Orchards are skirted, laden with fruit, and well-established farmhouses, nestling among the trees, bespeak plenty and prosperity. A picturesque cataract makes a glittering streak amongst the green, and commodious sheds and barns show an advanced stage in farming. At Owen Sound a rugged headland runs out into Georgian Bay, terminating in Cape Hund on the western point and Cabot's Head on the eastern. Here Sidenham River empties itself into the bay, and imposing cliffs skirt the coast, whilst the thick green foliage of the woodland contrasts with the nakedness of limestone quarries.

The steamer course lies between Cove and Fitz-William Islands, where the waters of Georgian Bay and Lake Huron commingle. Manatoulin is the chief island lying on the north side, after which come Cockburn and Drummond.



KAKABEKA FALLS-THE SOURCE OF PORT ARTHUR AND FORT WILLIAM ELECTRIC POWER



Huron Lake is rich in historic association. its shores began one of the greatest human dramas that the world has known. The dramatis personæ comprised the Jesuits of France and the North American Indians. Faith and superstition, civilization and savagery, were set in ever-varying scenes, amidst the wild grandeur of forest and lake until the curtain fell on the closing act at Lake Erie. by Huron lake that Brébœuf found himself in the seventeenth century, forsaken by his Indian guides. He, in company with two more Jesuits, had descended the French River, intent upon forming a mission to the Huron tribes. Brébœuf's canoe was separated from his companions' in the rapids, and he was compelled to make his way alone to the Indian headquarters. The conditions under which these tribes lived, the rites he witnessed, and the crude superstitions by which they were swayed, supplied little for a basis on which to erect a habitation of the Christian Faith which the Jesuits came to establish.

In the forest by that very lake the first missionary witnessed the Huron's feast of the dead, and in it may have read the crude shapings of belief in immortality. The reverence paid to the crumbling bones of ancestors testified to the belief that a soul resided there. It is an interesting speculation to consider how Brébœuf was affected by the recital of the virtues and bravery of the dead to which he listened as these crude children of the forest made their

pilgrimage to the great sepulchre. Would the virtues of the Christ equally touch them? He watched the contests in which the youths so eagerly engaged. and may have discerned in them a spirit of emulation, worthy of a better cause. It was in honour of the dead that prizes for these competitions were The effect on Brébœuf of the closing awarded. scene in the spectacle when the camp fires blazed in the night and awakened weird shadows amongst the giant trees is on record. In the drear funeral chant that rose from hundreds of voices over the bones and weapons piled in the open grave, the Jesuit priest heard a wail as of despairing souls from the "abyss of perdition."

These sepulchres, ten feet deep and thirty feet long, are still to be discovered in the Huron country. The customs of the tribes were not of the nature to inspire the Jesuit with hopes, any more than their ceremonies.

Their dwellings consisted of rows of strong saplings, roofed with bark, which afforded no privacy and fostered no separate family life. Members of the tribe could come and go when and how they pleased. Within the circle gossip, war councils, tortures, vices were practised in turn. The flickering light of the fire disclosed grizzled warriors, scarred youths, wizened squaws, gaily bedizened girls, volatile children, and snarling dogs. In summer the men were almost naked, in winter clothed with the skins





of buffalo, beaver, and otter, with rich trimmings of porcupine quills, eagle's feathers, and wampum ornaments on State occasions. Marriage was a form without a bond. It was consummated and dissolved without tears or reproaches on either side.

But the Jesuits were not left long under misapprehension of the true nature of the Indian character. They soon became the horrified witnesses of their cruelties. Every prisoner of war was subjected to prolonged torture. The victim would be fed with the choicest food, regaled with a peace pipe, and exhorted by a chief, a past master in the art of mockery, to take courage, as he was amongst friends. Even the sweat of fear would be gently rubbed off his face by the arch mocker. Meanwhile a number of fires would be lit, through which the prisoner would have to run, whilst his tormentors, armed with blazing torches, goaded him to greater speed. Portions of his flesh would be cut off and eaten, and respite given only to restore failing consciousness. All this continued until death mercifully proclaimed a final release.

For skill in the art of torture the females were said to surpass the males, and wherever there was a case for special treatment the victim was consigned to women. The diabolical gift probably accounted for the prevalent conception of the most malignant spirit in the form of a woman. Her robe was supposed to be made from the hairs of her

victims, and the forest fire was the type of her dwelling-place.

Despite this repulsive side of the Indian's character, there were phases that belonged to another category. Their courage was boundless, and they ranked bravery above life itself. They suffered in absolute silence, and marched to their enemies' fortified positions, knowing that it meant certain death.

Their sense of honour at times was so great that the perfidy of members of a tribe was regarded as a disgrace. On one occasion when inter-tribal terms were under discussion an old chief was known to commit suicide on discovering a serious breach of good faith on the part of one of his companions.

There was a native poetry in Huron life that might have seemed promising soil for the growth of "sweeter manners, nobler laws." They believed that nature was peopled with spirits. Tales must not be told in summer-time, when the spirits were listening and might take offence. Such recitals must be reserved until nature was locked in ice and snow and their ears were deaf. The thunder was a bird which caused the lightings to flash in opening and closing its wings. The violence of the storms was nothing more than the clamour of the young brood in their nests, and its mutterings the stooping of the clouds towards the earth to gather up snakes. Their eschatology made its appeal to the heroic temperament.

The way to Heaven was beset with difficulties which the Indians braced themselves to face. It was represented as a narrow path between moving rocks which each instant clashed together; or a swift river crossed by a shaking log, and guarded by a ferocious dog which sought to drive the aspirant into the abyss. Whilst these crude tenets appealed to courage and perseverance, there was nothing connected with them that stood for a higher ideal of faith and conduct. The Indians' gods were no better than themselves. They were represented as animated by lust and cruelty; and obedience was stimulated by sentiments of hatred rather than trust. The worst passions, not the nobler qualities. characterized these divinities. In them vice was deified, not virtue. This was the material out of which the Jesuits sought to fashion a nobler manhood on the shores of Lake Huron. The conditions were as unpromising as those found by the missionaries of a later period in Terra del Fuego, the inhabitants of which Darwin pronounced incapable of either civilizing or christianizing. And what was the character of the men who undertook the mission to the North American Indians? A brief glance at their history answers the question.

The founder of the Jesuit order was Ignatius Loyola, a man of singularly composite character. He embodied in his personality the mixed elements of soldier, courtier, and zealot. These qualities were

reflected in his followers. Creed and dogma were not propositions that commanded intellectual assent, but docile obedience. The calm realm of thought was made impossible in the whirlwind of unthinking action. Dogma was not a thing to be argued, but enforced, and at any cost—life itself was an insignificant item in the programme. The shaping of creeds and framing of morals were not a matter for many minds, but for one superior mind, in the conclusions of which all others were required to acquiesce.

To suit this spiritual dictatorship, the ordinary rules of right and wrong were no longer binding. Black was white and white black if the Superior so willed it. Zeal being the dynamic of the Jesuit order, exercises were enjoined for the qualification of the novitiate. He must understand the penalty of being outside the true fold, and meditate on final things until the meaning of a lost soul was fully imaged to his mental vision. So strenuous were these exercises that the disciple imagined he could hear the howlings of the damned, witness their convulsive agonies, look into the infernal pit, and tremble at the fire that burned without consuming. meditative part of the curriculum covered a course of two years. Next followed practical training, in which the disciple was required to undertake the most menial duties in the sick-room and the hospital. was taught in begging his own bread from door to door: zeal, in watching his companions for any "tendencies"

which were to be immediately reported, whilst he himself was watched in turn; diplomacy, in assuming disguises of soldiers, merchants, astrologers and mandarins for the purpose of making converts and enlarging the flock folded in the Church of Rome. Only in the light of such discipline is it possible to understand the sufferings and hardship endured by these first missionaries to the North American When prisoners fell into the hands of Indians. their captors, the belief that baptism was all that was needed to insure eternal bliss no doubt helped to reconcile the priests to the torture and unspeakable cruelties they witnessed. Indians who declined baptism when free, submitted to it under torture. The Jesuits regarded with equanimity any agony that directly led to so desirable a result. Cases are on record where the priests, themselves prisoners. had the forejoints of their fingers bitten off by their tormentors, and with their bleeding hands baptized their fellow-sufferers in their dying agonies. Under cover of giving drink to a prisoner burning at the stake, a portion of the water would be spilt on the victim, and the formula of baptism surreptitiously pronounced.

The eagerness to perform the ceremony took no account of the character of the subject. A dying Algonquin threw himself on an Iroquois prisoner and tore his ear off with his teeth, but the Algonquin was baptized by a priest immediately after the brutal act.

There was even some analogy between the Indian practises and the Jesuits' creed. "You do good to your friends," said Le Jeune to an Algonquin chief, "and you burn your enemies; God does the same"

Hell was depicted to them as a place where, according to Jesuit theology, the hungry would get nothing to eat but frogs and snakes, and the thirsty nothing to drink but flames. The brutal temperament of the tribes was imitated in the interests of the Indians' conversion. The decorations of their mission church on the shores of Lake Huron were criticized by a priest as not being sufficiently aweinspiring. "If three, four, or five devils were painted tormenting a soul with different punishments, one applying fire, another serpents, another tearing him with pincers, and another holding him fast with a chain, this would have a good effect, especially if everything was made distinct, and misery, rage and desperation appeared plainly in his face."

Apart from the crudities and grotesqueness of the Jesuits, stand their splendid heroism and devotion. One must judge them in the dim light of two centuries ago. Their conception of truth was the ordinary medieval one in which they "saw men as trees walking." Their endurance and self-sacrifice attest the divinity in man and remains an imperishable memorial. As the steamer plied along the shore of the great lake, one could see in imagination

these missionaries of the Cross with their faces set in the hopeless task of reclaiming these children of logues, with his mutilated hands the forest. extended in benediction over the heads of the men that tortured him. We know how he went back to Rome so battered and broken as to be unrecognizable, but the Indians' needs haunted him, and he returned to his mission, to be tomahawked in the end. Brébœuf and Lalemant, they, too, appear on the scene, lacerated, tortured, the formula that they had so often used applied to themselves in cruel derision by their executors. "We baptize you," they said, pouring boiling water on their heads, "that you may be happy in Heaven." Brébœuf never flinched, although they cut strips of flesh from his limbs and devoured them before his eves. "You told us that the more one suffered on earth, the happier he is in Heaven. We wish to make you happy because we love you, and you ought to thank us for it."

Then they scalped him, and paid the last testimony to his bravery, as emphatic as their tortures, by drinking his blood that his patience and courage might be theirs.

So ended the life of Jean de Brébœuf. France gives him a first place amongst her saints and martyrs. The roots of his race extend to British soil, for in his veins flowed the blue blood of the Earls of Arundel

Great as was the zeal of the Jesuits, their mission was a failure. Its weak point lay in the fact that they were more concerned in converting the Indians to the Roman Catholic faith than in subduing their warlike temper and quelling tribal strife. Their connexion with the Hurons made the Iroquoisthe enemies of the former—their enemies also. The latter were the most powerful and warlike of all the North American Indians. Perpetual feuds were waged between the tribes. The ravages of the tomahawk and the gun left no room for the cultivation of agricultural pursuits. The Indians moved from place to place, too restless to take root, paying no heed to the great natural resources which invited their labour. With the exception of trapping, all industries were neglected. Wampum was the only currency they knew, a few beads the highest reward they coveted. The very principles that the Jesuits sought to inculcate, forgiveness of injuries, suffering without murmuring, were to the Indians poor weapons with which to fight their enemies—openly ridiculed by them, and rejected with contempt. Even when a truce was called between the tribes, and peace speeches were made, it was only marking time for a fresh outburst of hostilities.

The final struggle at Lake Erie practically exterminated the nation that dwelt on its shores. But the victory was bought at a high price. The battle broke the power of the conquerors themselves

and arrest Conditions

whose very name was a terror to all other tribes. The dead of the victors were as numerous as those of the vanquished, and the Iroquois never recovered; as they had lived by the sword, so they perished by the sword. Their last war-whoop had been uttered, and their next rally cry evoked no response along the wild lake-shore.

Lake Superior joins Huron by picturesque rapids. The narrow confine through which the water of the great lake endeavours to discharge itself is a seething torrent, white with anger and beautiful in its wrath. It is one of the places where the Indians still display their skill with the canoe whilst catching trout. To the uninitiated it would seem impossible for a craft to live in such a current, but the natives negotiate it with impunity.

For the purposes of navigation a lock has been constructed between Huron and Superior. It is a triumph of engineering, and is the largest in the world, 900 feet long and 60 feet wide. It has cost £800,000. Sault Ste. Marie marks the growth of important industries along the shores. Rolling mills, steel plant, car factories, and other trades have sprung up there within the last few years. The St. Mary River flows into the lake at that point on the borders of the United States, sweeping round St. Joseph Island.

There is good angling in this neighbourhood, and the trout run to a large size. One served at

the saloon table d'hôte, from sectional evidence, must have been 12 lbs. to 14 lbs. weight. One has a prejudice against large trout, except as a diversion with a fishing-rod, but the quality of Lake Superior fish as a comestible is beyond reproach. I have never tasted anything finer. It is necessary to go inland a few miles to get the best fishing. I had introductions to local anglers, and reliable information on the subject, but pressure of time prevented me from breaking the journey. Off the mouth of the rivers trolling can be had for the big fish, and a few miles up the streams good fly-fishing can be had.

Sault Ste. Marie is the connecting point for the Soo Pacific Line which links Canada with the United States, taking in Minneapolis and Dacota. It joins the Canadian Pacific main line again at Moose Jaw. Superior is the largest of the American Its dimensions may be gathered by comparison with England and Wales, which it could swallow and leave a considerable margin all round. From the centre, land is out of sight, and it becomes a veritable sea bounded by the horizon. It is the ocean prairie of America, and gives the same sense of vastness as its twin sister of the great plains. The steamer course lies south of Caribou Island, with Montreal and Leach Islands lying north. The international water-line which divides Canada from the States proceeds from South Caribou to



MISSANABIE RIVER. FISHING FOR SPECKLED TROUT



Pigeon Bay viâ Gull Island, off Isle Royal. The Rideau River touches the lake at Otter Cove, and the Nipigon on the same coast further on. The latter is the finest trout river in Ontario. Three pounds are charged for a licence to fish it, which is about three times the usual charge. runs from the lake of the same name, and consists of a series of swift rapids that lend themselves to the highest form of the angling craft. are a large size, and rise to the fly freely. It is advisable to push up the river a couple of miles before commencing to fish. Competent Indian guides can be hired, who know all the pools, and are skilful in the management of the canoe in the dangerous rapids. Jackfish is another centre on the coast where angling is procurable. the best sport, a camping excursion is necessary, which can be competently organized by guides who live at Jackfish, a station on the Canadian Pacific Railway. On the north shore of Superior, Missanabie offers all the sporting advantages of Nipigon, with excellent rapids where, donning waders, twopounders can be taking with the fly.

A number of bights off the coast on the north side of the lake form good harbourage for the trading boats. Of these, Nipigon Bay, Black Bay, and Thunder Bay are the chief. It is a storm-bound coast, and at times waves rise and swell in angry tumult that rival those of the far distant Pacific, breaking against its islands,

and reverberating along the rocky shore. Lake Superior takes a heavy toll of life, and the bodies of its victims have been so rarely recovered that it has gained for itself the name of "the lake that never gives up its dead." The water is intensely cold on the hottest summer day.

The centre is said to be unfathomable, and even along the coast there are enormous depths. Last summer an engine was struck with a huge rock from the cliffs, and was swept into the lake. In a depth of 65 feet, a diver reached it, and recovered the body of the driver. Next day, he went down again, but the engine had disappeared, leaving the ledge of rock on which it rested, scarred. The man went down to a depth of 180 feet, but the body of the missing stoker was never found.

Lighthouses are placed along the coast, which flash out their warning signals. There are also patrol stations on the look-out for ships in distress. On the State side, there are regular beats, the eastward and the westward patrols meeting at stated points, and so establishing a complete surveillance of the coast.

Soon the steamer drew away from all landmarks. The water was so smooth that it remained unruffled except where the prow of the boat broke it into rolling ripples, or a great lumber or grain vessel left a long white streak behind.

The number of steamers that ply on the lake



FORT WILLIAM, THE MISSION RIVER GRAIN ELEVATORS



point to the extensive traffic which this highway from the Far West affords. We were never long out of sight of the black smoke line, which stood out in sharp contrast against the clear blue sky. As evening advanced, the great islands behind us became mere specks on a far-off water waste, and the chill of departing day was felt. The sun dipped low on the horizon, and masses of piled-up clouds glowed as with hidden fire; patches of blue sky were marked with a tracery of gold and grey. Half buried in the sea the red disk sank, until the last lingering ray disappeared, and it was night.

The early morning brought us within sight of Thunder Bay and Sleeping Giant Mountain. Arthur and Fort William at the head of the lake are rapidly rising towns, anticipating by their enormous grain elevators the corn produce of the Golden These twin ports developing side by side and presenting the interesting problem to speculative minds as to which would gain pre-eminence, are the best examples of what railway enterprise can achieve in connexion with a growing country. Everywhere there are palpable signs of industry; large trading steamers, extensive wharves, and coal docks; facilities for loading and unloading, and transporting the products of forest and field by land and inland sea. It could scarcely be surmised that Port Arthur only a few years ago was practically stagnant until it received the initial impulse from the construction of

the Canadian Northern Railway, the youngest of the great transit systems which marked the beginning of a new era of commercial prosperity along the shores of the great waterway.

The largest grain elevator so far constructed is a conspicuous object on the shore. It holds 7 million bushels of grain. The two ports, between them, have a capacity for storing 20 millions. Amongst prospective enterprise are included the construction of a large dry dock and ship-building yards at Port Fort William is the disembarking point of Arthur. the great lake trips, and a train_stood in readiness to take passengers to the main line station on the Time changes here from Eastern Canadian Pacific. to Western methods of chronology, which puts the The distinction between a.m. clock back an hour. and p.m. is abolished, and the dial of the clock makes a consecutive rotation from 12 to 24. As a concession to inbred conservatism and the belief that mortals are slow to learn, the old and the new modes of reckoning are inscribed on the railway clocks. For this, one is profoundly grateful. One scarcely knows where he is when, on asking the time of day, he is told that it is twenty-three fifteen!

The railway journey to Winnipeg epitomizes all that lies behind and before—a rocky region intersected with rivers and lakes; forests stretching away out of sight; mining industries locked in the great mountains; falls that rival Niagara in magnificence,



and all the branches of industry, from the Government experimental farm at Dryden to the great water-works at Keewatin. There the Lake of the Woods, 3000 square miles, furnishes the greatest water dynamic in the world. As the train nears Winnipeg, the introductory chapter in the encyclopædic volume of the prairies begins, and many days will have to be spent in looking through its pages.

CHAPTER VIII

The province of Manitoba—The realization of "Sea Dreams"—Civic and agricultural growth—Winnipeg—Railway enterprise—The Canadian Pacific and Grand Trunk Railways—System of Government—Schools—Public Park—Prices of produce—"Ralph Connor"—The Canadian Northern Railway—Winnipeg to Edmonton—The chance of a millionaireship—Edmonton—The lady and the "gentleman" bus conductor—Colleges and schools—Churches and drinking saloons—Vegetable products—Edmonton to Calgary—Flourishing agriculture.

HEN we think of the years necessary to achieve the wealth and splendour of nations, and look at the Province of Manitoba, it almost seems as if some good genius had waved her wand, and lo, a barren lonely marsh and wild prairie are suddenly changed, and golden harvest-fields, lowing cattle, model dairies, comfortable homesteads and happy children rise as if by magic before our eyes. We not unnaturally ask, "Whence came these?" and then think of the city clerk's vision in Tennyson's "Sea Dreams," of a woman grown to enormous strength by "working in the mines," and like him wake to realize that honest toil—hard and matter-of-fact—is the secret of collective as well as individual growth.



PRINCE ALBERT BRIDGE, SPANNING THE SASKATCHEWAN RIVER

•		
•		

The wealth that lies in the rich soil of this vast territory justifies the legend. Its output is seen in prosperous cities and towns, rapidly spreading far and wide. When Manitoba incorporated itself in the Confederation in 1870, it had 17,000 inhabitants, and now upwards of 400,000 English-speaking people form its population. In 1870, its agricultural produce was not even recorded. In 1881, an acreage of 51,300 yielded 1,000,000 bushels of wheat, and 1,270,268 bushels of oats. In 1905, these odd millions jump up to over 55,000,000.

Only 5,000,000 acres of land are at present under cultivation, a patch compared with the actual possibilities, as Manitoba is larger than Scotland, Wales and Ireland combined, and contains 74,000 square miles of territory. Of this 30,000,000 acres are arable land.

Winnipeg is the seat of the Government, and holds a foremost place amongst the cities of the great continent. It is called The Gateway to the West. Its growth has been extremely rapid, and it possesses all the modern conveniences of a great centre. London has nothing to compare with its spacious streets, and New York can scarcely out-do it in skyscraping buildings. Electric cars run in every direction, and public parks and promenades are provided for the pastime and enjoyment of its thriving citizens. Its thoroughfares are daily crowded with busy merchants, many of whom are the descendants of

the early Scotch colonists who reside in imposing residences on the outskirts of the town. A walk in that direction shows that Winnipeg, like all great cities, is cultivating suburban life.

New towns and villages are quickly springing up, contiguous to agricultural and manufacturing districts, and in the rapidity of their growth make Winnipeg the Chicago of the Dominion.

The great incentive to development has come from railway enterprise. The Canadian Pacific running from east to west has many branches which bring settlers within reach of rich agricultural soil. The Grand Trunk system, and the Canadian Northern, each exploring different territory, have done much in opening easy avenues for the transit of grain and stock to Winnipeg and other important centres where traders find remunerative markets. Indeed, one can see, in addition to provincial economic advantages, the possibility of new routes by land and sea to and from and across the Dominion through what is now a daily event—the extension of these great railway systems.

Amongst other valuable services rendered by the Government is the issue of reliable information on trade and agriculture. There are annual returns from the Provincial and Dominion Board of Trade which can be accepted as bond fide. Emigrants and settlers are no longer the dupes of advertising agents and others with axes to grind. The returns are too



HARVEST, MANITOBA

good to need embellishment or exaggeration, and any figures which are quoted here have the imprimatur of the high authority to which I have referred.

The Government of Manitoba is administered by a single Legislative Chamber, and executive Council on practically an electoral basis of manhood suffrage. The public school system is excellent, and entails the largest expenditure in the annual budget. Public works come second, and the administration of justice third. Schools are free to all children between the ages of five and fifteen. In larger towns resident pupils are free to the high schools and colleges. They are maintained largely by Government, who set apart sections of land in each township which yield part of the revenue; the rest is provided by a The growth of these schools is an index land tax. to progress. In 1886, the number in the province was 422, with an attendance of 16,834. there were 1,847 schools and 64,123 scholars. Schools of agriculture are also provided, and associations for instructing the settlers' children in live stock, fruit growing, dairy farming, and practically every branch of industry within the province requiring skilled labour.

There is an excellent tram service to the outskirts of the city, where there is a fine park, containing zoological gardens which hold good specimens of bear, wapiti, mountain goat, beaver and other animals. The Red River flows through the park, on which motor boats and yachts were sailing. The wild features of the place are preserved intact, and shady nooks and vistas of spreading trees lend their charm. It was intensely hot, and seeking a cool retreat I lay down and went fast asleep. A singular sensation awakened me, and on opening my eyes I got a glimpse of a brown animal scuttling into the grass, about the size of a gopher. He did not give me time to classify him, but left a distinct impression on my face, over which he ran.

Commodities in Winnipeg vary in price according to the supply; apples very cheap; oranges very dear, $2\frac{1}{2}d$, each; plums of an inferior quality, 5d, a pound. On the other hand, restaurants which almost jostle each other in the streets, provide an excellent luncheon for 1s. 3d. Hair cutting is a luxury; half a dollar, or 2s. 1d. in English currency, is charged for trimming one's beard, which had the effect on one forlorn traveller of making him vow that henceforth he would become a Nazarene.

I spent a couple of delightful hours with "Ralph Connor"—Rev. Charles W. Gordon—who, in addition to his literary career, is a distinguished leader in the Presbyterian Church. He has seen Winnipeg grow from the day of small things, and watched men on the spot develop from obscurity into opulent merchants.

I have alluded elsewhere to his place in literature.



A HEAVY CROP, MANITOBA

He is an ardent disciple of Isaac Walton, and as we had travelled over similar ground it was pleasant to compare notes. He is saturated with the mystery and grandeur of the Rocky Mountains, the full aroma of which pervades his books. His influence in the higher walks of his profession has made him the original of "The Sky Pilot" he has so well portrayed.

Singularly enough, another leader in the religious life of Winnipeg is the Rev. J. L. Gordon, with whom the novelist is often confused. The former, upon whom I also called, narrated a number of cases of mistaken identity between the minister and the author. The error is by no means uncomplimentary to "Ralph Connor," as his namesake is a strong personality and one of the most popular preachers in Canada. Each has cut deeply in his own line, and both possess a charming grace and simplicity.

A railway recently constructed by the Canadian Northern runs from Winnipeg to Edmonton, a distance of 1000 miles. It traverses an undeveloped territory through the provinces of Manitoba, Saskatchewan and Alberta. With the exception of an occasional farm homestead between the stations, at which the train stops, its course is through virgin soil.

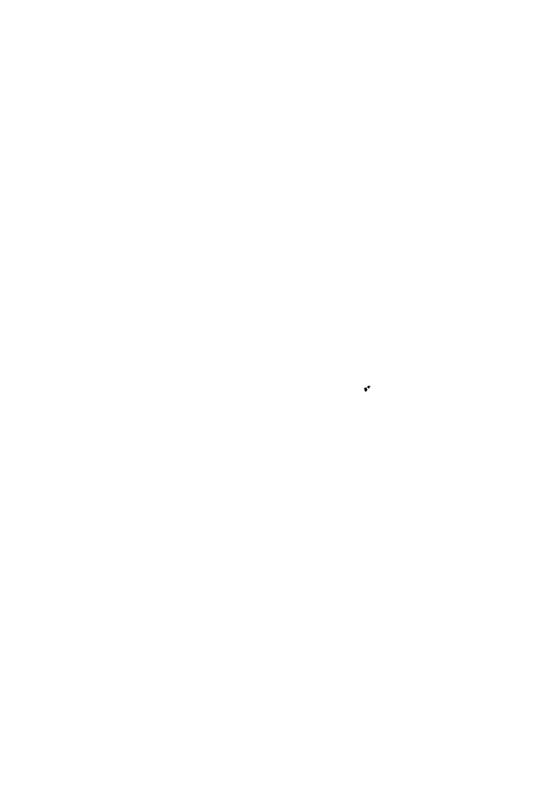
The advent of the railway gives an enhanced value to the adjoining land. It is the philosopher's stone, which turns base metal into gold, or, better

still, the wilderness into a fruitful plain. It affords facilities for the opening up of markets, the transportation of agricultural implements which are absolutely indispensable in a region where labour is scarce at best, and at times altogether unavailable. Without the railways, the wealth of the prairies, as well as of forest and mine, is a locked-up good, as unreachable as the gem of "unfathomed caves of ocean." Men may buy the land, sell it, gamble in it, but it does not become a workable asset until it is linked up with the towns and cities near and far. The great waterways, valuable as they have been, can never become substitutes as a means of transit. The method is slow, and if it affords easy access to a district, it is in the same proportion difficult of egress. A farmer may look at the golden grain and the smiling fruit, and the fattening kine, and eat his heart out for the long-delayed opportunity of exchange, which is the basis of all commerce.

The Canadian Northern Railway had only been opened a few months when I travelled by it last summer. Already the effect was to be noticed in the activity at every stopping-place along the line. There were houses newly erected, and others in the course of construction. Barn-like structures advertised themselves in large letters as hotels. Telephone wires stretched from hut to hut, and agricultural implements, fearfully and wonderfully made—at least to the lay mind—were piled near the stations.



DEEP PLOUGHING WITH OXEN TEAMS, SASKATCHEWAN



Every platform was a mart where farmers, agents, and speculators were there and then willing to sell desirable sites and thriving farms. Judging from what I heard, I might have been a millionaire, had I only the temerity, half a dozen times over before reaching my destination. This spirit of disinterestedness on the part of vendors has been checked of late years by the formation of reliable bureaus under Government supervision. There is no longer any necessity for a purchaser of land to find himself in possession of a swamp, a by no means uncommon experience. The Prairie is not a uniform El Dorado. It has its arid wastes, its thin substratum of fertility, as well as its deep rich loam, and there hover over it all, hawks which are ready to pluck any unwary bird about to stretch its speculative wings.

The journey to Edmonton is in itself an object lesson in inequalities. Great rivers are crossed, cutting their sinuous way through vast plains, pregnant with the highest possibilities of agriculture. Rocky soil comes into view of a different order and more limited in productive qualities; lakes with great stretches of marsh, out of which flocks of wild duck rise, attesting its suitability for their habitat and little more.

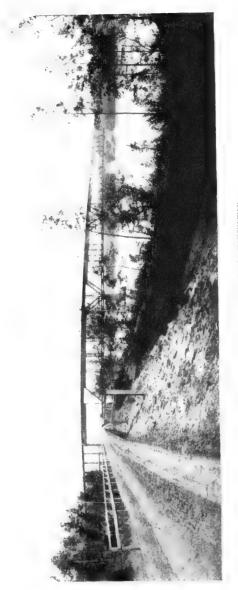
It was late when we arrived at Edmonton, the capital town of Alberta. A number of omnibuses were drawn up at the station for the convenience of passengers. Choosing that more archaic method of

travel rather than the electric trams, I found myself in company with half a dozen others, rattling over the worst roads possible to imagine. The outskirts of Edmonton, like most new Western cities, have to wait on their betters. The broad well-kept streets in the town have had undue attention paid to them, to the neglect of more remote thoroughfares. The bus stopped at various hotels, the conductor arranging to deposit his passengers in the order which suited his own convenience sooner than theirs. He took me a couple of miles out of the way sooner than go round the corner at an earlier stage. The reason was obvious—my hotel happened to be in the district where the horses were stabled, and he left that for the last.

He had several passages of arms with his fares, to which I listened with interest, as showing the high point and fine shading that labour had reached in the Dominion. Like everything else, it has the defect of its virtues.

"You must get down here," he said to a lady burdened with parcels and a valise; "the horses can't go up the hill." The lady looked up with surprise, and replied with great politeness, "A hill! There is no hill, gentleman! This is So-and-so Street. I have parcels, gentleman, and it's late."

The "gentleman," nonplussed at this display of topographical erudition, banged the door, and the omnibus went on.



RAH WAY AND TRAFFIC BRIDGE, SASKATCHEWAN

It was close on midnight when I reached my destination. Rate of travel, three miles in two hours!

Edmonton is situated on the Saskatchewan River. well raised above its banks, and commanding an imposing view. The population is nearly 25,000, almost double the total of the 1906 census. It is the seat of government and the official place of residence of the Lieutenant-Governor. The Alberta College has its headquarters there, with 400 students attached. The educational system is admirable. Large elementary schools have sprung up in a few years, and a high school for advanced knowledge and university preparation. The property is valued at over £100.000; all public requisites—water, electric light, telephones and tramways - are municipalized. The system of taxation makes no distinction between prairie land and land built upon. A vacant lot is assessed at exactly the same valuation as one with a five-storied building or factory on it. There is also a business tax determined by floor space and nature of the industry.

There are twenty-four churches, and twenty-one drinking saloons. The Secretary of the Board of Trade, in commenting on this, said: "Churches are allowed an unlimited margin of growth, but drinking saloons cannot be increased." The proportion in some of the provinces is one to a thousand of population.

The evidence of a great coal industry is at once noticed on reaching Edmonton, in the blackened track near the station, the elevated railway with its sidings, and the inevitable row of coal wagons. The discovery of this mineral, which is said to be a high-grade lignite, places the city in a unique position in relation to the Dominion. So far it holds the monopoly of the trade. The report of Government experts puts the area of the coal-bed at 11,000 square miles, and the quantity at 60,000,000 tons. The value of the find to the inhabitants is most important, as the fuel can be purchased at 13s. per ton delivered, or 7s. at the pit mouth.

Over 25,000 tons per week are transmitted on the Canadian Northern Railway from the Morinville mines, and the companies' projected extension is planned to traverse the Brazeau River valley, where further vast deposits of coal have been discovered and only await railway facilities to become a cheap and marketable commodity.

At the Board of Trade offices I saw samples of various agricultural products, grown in different parts of the province, which showed the versatility and richness of the soil.

From Edmonton to Calgary is another section of the Canadian Pacific Railway. It has been opened up long enough for agricultural interests to take more definite shape. Near Edmonton well-tilled farms are to be seen and herds of cattle browsing on

A COAL MINE AT EDMONTON



the pasture. It is a section of the prairie, the severe flatness of which is broken by undulating hills.

Flax is cultivated in large quantities, which is used in the manufacture of oil cake and ropes.

The ground was being broken up for the winter wheat as I travelled along the line, and from the train we could see the steam ploughs busy at work. The grain is threshed in the field where it is reaped, and the straw in that locality is burned, as it finds no market. In other parts of the agricultural districts it has an economic use, and commands a good price.

CHAPTER IX

Through prairies to Rockies—Portage le Prairie—Regina
—Government offices and mounted police—Climate—Growth
of railways—Saskatchewan Province—Census returns of
industries—Moose Jaw—Alberta Province—Uncultivated
millions—Picturesque forests and streams—The home of the
buffalo—Four great rivers—Misconceptions of climate—The
heat line—The "chinook"—Wild grasses—Cattle rearing—
Cereal productions—Exhibition medal awards—Wheat returns
—Clover—Sheep and wolves—Horse breeding—Champions at
the World's Fair—Calgary—Democratic principles—Ranching
and lumbering—The Bow and Kananaskas Rivers.

OURNEYING from Winnipeg by the Canadian Pacific Railway, the great plain stretches to the horizon. Its topographical features are varied by lakes and rivers, but the general sense of flatness is so great that the traveller is unconscious of the fact that in the first fifty miles there has been a gradual ascent of 100 feet.

For many miles westward Winnipeg leaves its impress on industrial life, repeating itself in agriculture and commercial enterprise. At Portage le Prairie a busy grain market is indicated by huge elevators and agricultural plant. Mills and factories show activity in other branches of trade. At Brandon there are large flour and planing mills, and a



THE SWAN RIVER



Dominion experimental farm; it is a town of 13,000 inhabitants, in close touch with the markets.

Regina, the capital of Saskatchewan, marks a further advance in trade and civilization, and is a connecting link between the northern and southern portions of the province. The Government offices are located there, and the Lieutenant-Governor's residence is a conspicuous building on the right-hand side of the line. It is in keeping with law and order that the mounted police should be stationed in the same place. The Government buildings are an imposing suite which cost £300,000.

Saskatchewan lies in the same latitude as the British Isles. Owing to the influence of the Gulf Stream our own climate is largely exempt from extremes. Saskatchewan is of equable temperature, but for other reasons. It has a dry, clear atmosphere owing to its elevation above the sea, and is free from destructive storms. Summer heat averages about ninety degrees, but the winter is cold and dry. Railway accommodation has kept pace with the rapid growth of the settlements.

The province of Saskatchewan covers nearly 230,000 square miles. The Northern division is traversed by the Canadian Northern and Grand Trunk Railways. The South-Eastern portion is an extension of the grain lands of Manitoba, embracing the wheat plains of Regina and Moose Jaw. The part lying between the Alberta boundary and Swift Current

and stretching to the international boundary-line, is occupied chiefly by ranchers. It is especially suited to the rearing of cattle on account of the abundance of "buffalo grass." This is a short herbage on which cattle can thrive all the year without any other fodder. The Cypress Hills constitute a sheltered area admirable for stock farming. What is known as the "chinook" wind, which blows from the Pacific ocean across the Rockies, prevails in that locality, and is advantageous.

Between the north and south branches of the Saskatchewan River lie vast prairie lands, which in due season are likely to yield extensive crops. far it is only a vast area of possibilities. Its soil is rich in the ingredients which nourish wheat plants; the climate is dry, and there is an absence of insect pests. Flax cultivation is very profitable, and crops can be relied upon from the first year. One notices these all along the railway track. In the great forest belt beyond the Qu'appelle River, there are areas suited to the raising of live stock or mixed farming. In the central division of the province, cattle and sheep require sheltering for the winter months, and sheep succeed best in small flocks.

The official returns indicate the growth of these and other industries. The Dominion census for 1901 reports 217,053 cattle and in 1906, 472,854, an increase of 255,801 in five years; 300,000 lbs. of wool are shipped every year.



DISKING ON THE EDGE OF THE PRAIRIE



There appears to have been no diminution in the yields of crops from the time of the earliest settlers. The soil is clay, covered with 18 inches of rich loam, constituting an excellent bed for seed, and producing No. I hard wheat, for which Western Canada is famous.

Regina is a rapidly growing city and has a population of 10,000 people.

Moose Jaw is 40 miles beyond the Saskatchewan capital. The origin of the name is associated with a legend of an enterprising wagoner who mended his cart with a moose jaw-bone. It is rich in store-houses and stock-yards connected with the graingrowing area. The growth of the population and the prosperity of trade in this part of the province has resulted in the laying down of a branch line which takes a north-westerly course to meet the requirements of agriculture. The extension of this line to Lacombe in Alberta is already projected. As an example of rapid growth, Mountain Lake district in the vicinity may be cited. In 1901 its small community of 256 people grew to 23,553 in 1906.

Alberta is one of the two provinces that sprang out of the great plain lying between the Rockies and the great lakes. In extent it is greater than Germany or France, and Texas is the only New England state which exceeds it in size. It lies in the same zone as northern and central Europe, and its climate is similar to that of the countries within those latitudes.

During its short existence, its wealth and population have made rapid strides, and it is an example of young Canada growing with the advantages of the training of the Mother Country, and applying the experience to the new opportunity which the province affords.

Alberta contains over 160,000,000 acres of land, 100,000,000 of which are available for settlement. In 1909 only one per cent. was under cultivation. It is a vast undulating tableland, gently inclining towards east and north, and picturesquely set out with forest, hills and streams. Everywhere there are lovely lakes, yielding an abundant revenue of white fish. It was once the feeding-ground of the countless herds of buffalo, which were attracted to that region by the rich pastures. Alberta is well watered by great The Saskatchewan, with eleven tributaries rivers. which form two branches, one irrigating the south, the other the north and central plains. River and the Athabasca, two huge watercourses of the Mackenzie basin, drain between them an area of 1,000,000 square miles. The Hay River forms the quartette of this combined watershed.

The climate has been depreciated, especially in English literature, by an erroneous notion that a rich fur trade was associated with Arctic conditions, and that Alberta, lying so far north, must be a region of ice and snow. When the Canadian Government dispatched its explorers they discovered that the

habitat of the fur-bearing animals was thousands of miles removed from the wheatfields of Alberta. The heat during the summer is equally distributed throughout the province. The rainfall takes place in May, June and July; and during the harvesting months dry weather may be reckoned on unhesitatingly. It is a common mistake to judge climate by latitude. Other forces materially affect it. Wind currents from land and sea, and thousands of square miles of high barren plains have a modifying effect over the entire province as far as the Arctic Circle. The line of greatest heat passes over Port Vermillion, 500 miles north of Edmonton, and 800 miles from the States boundary-line.

The chinook, a delightful breeze from the sea, is said to have a beneficial effect on the crops. In proof of the friendly climatic conditions, the official reports pointed out that the Indians lived for ages in these northern regions, and pitched their wigwams on the banks of the Athabasca and Saskatchewan, and wintered their horses on the unsheltered plains.

The North-West Mounted Police, which were organized in 1874, and are intimately acquainted with the province, confirm these reports. Two members of the force, whom I met on my homeward journey, described it as the finest climate in the Dominion. From the first of June to the first of August there are only two hours of darkness in the twenty-four. Wild grass is so good that there is no need to

cultivate it. In the autumn, thousands of stacks may be seen. There is no rain to spoil the making. A variety of blue grass highly valued by cattle owners, grows in many districts, and the well-known Kentucky species is said to flourish better there than in its native soil.

The ingredients of the land consist of marly clay of great depth, overlaid with rich black absorbent soil, which chemical analysis has shown to possess all the plant foods, with almost a complete absence of stones. The latter feature greatly reduces the cost of breaking up the soil, and the steam plough effects the process at a cost of 15s. to 25s. per acre. Cattle grazing is carried on under favourable conditions, as there is no winter slush, and the animals thrive and grow fat. In April the snow clears, and spring opens, often with a breath of the chinook winds, which raises the temperature almost to summer heat.

It is as a cereal-producing province that Alberta is likely to be distinguished in the future. The British Association meeting at Winnipeg, August, 1909, pointed out that it is par excellence the wheat belt of the continent, and just as other areas of the United States have become celebrated as the corn belt of the continent, the provinces of the Canadian West will become the great wheat-producers for the United States and Great Britain. At the exhibition at Philadelphia in 1876, a medal was taken for wheat grown 750 miles north of the international boundary



BREAKING UP THE SOIL, ALBERTA



line; and at the World's Columbian Exhibition, 1893, the highest award was given for wheat grown in the Peace River valley.

The following returns show the progress made between 1900 and 1909:—

Fall (autumn)

Wheat	1900	1906	1909
Acres		8 3 ,496	104,956
Bushels		2,191,611	3,093,422

Spring wheat

Alberta also grows a fine quality of oats. Fifty to sixty bushels an acre are a general yield, sometimes running up to 100 bushels. Thirty-four pounds is the standard weight for a bushel of oats. At the Provincial Seed Fair in 1909, a bushel weighing 50 lb. took the first prize. Alberta invaded Paris, and took the highest award for oats at the last exhibition. The increase in the production of this important cereal has been from 3,000,000 to 24,000,000 bushels in nine years.

The province yields two or three different kinds of clover, which command a high price. The timothy species yields from two to three tons an acre, and is sold at from £2 10s. to £3. Alfalfa commands the highest price.

The fertility of the soil, singularly enough, is

attributed to the climate, which at one time was regarded as inimical to agricultural interests. Prof. Macoun, of the Canadian Geological Survey, points out that as long as the West is blessed with winter frosts and summer rains, so long will teeming crops be the product of her soil. The frosts help to crumble it; the rain and sunshine do the rest. Artificial means of nourishing are unnecessary, the grain entrusted to its keeping has eighteen inches to feed on.

It naturally follows that the conditions that prevail in Alberta supply the best advantages for the rearing of live-stock. The breaking up of the soil has also been instrumental in disbanding the enormous herds of cattle belonging to the old ranching days. Cattle-feeding on a smaller, and from the farmers' point of view more efficient, scale is carried on as a remunerative industry. The demand for home-grown beef is exceeding the supply.

Sheep are kept nearer home, and are no longer the prey of the destructive coyote. A good wolfhound or two are a sufficient provision against that. The reward given by the Government for the wolf's head has tended to put a check on the depredations of the thief.

Success in horse-breeding has been marked of recent years. The heavy draught teams seen in the towns and cities indicate this. At the Pan-American Exhibition, and the New York Horse Show, the champion hackney came from Calgary. At the

THE HARVEST, ALBERTA

World's Fair at St. Louis in 1904, the champion stallion and mare were raised in Alberta.

From Calgary to Saskatoon a new branch of the Canadian Northern Railway has been opened. It traverses a tract of rich fertile prairie on which towns are clustering with great rapidity. The laying down of rails and the growth of towns follow as cause and effect. The traveller who found nothing but the most primitive railway station on this newly-constructed track one year, and passing the same way a year later, would fine a population of one thousand people and all the bustle of a thriving town. This is precisely the case of Kindersley.

Saskatoon, the starting point of this branch, in 1903 consisted of 113 souls. In seven years it developed into a population of 13,000, and possesses all the advantages of a university, an agricultural college, and five schools.

From Swift Current to Medicine Hat the Canadian Pacific line skirts hills rising to a considerable altitude. The route leads through the valley of the South Saskatchewan River. Fruit-farming, for which the district is particularly adapted, is carried on there. The industry is fostered by the Government, which works a model farm in the district. All along the journey to Calgary the great plains hold the monopoly. Rivers, lakes, and occasional distant rising slopes are passing incidents. It is prairie, prairie, boundless prairie on both sides of the train for days.

Great plains roll away before the eyes, untouched by human hand, unbroken by agricultural implement, as virgin as when the primeval light fell on them. Here and there a solitary homestead comes into sight, but the lonely pioneer of civilization only emphasizes the awful sense of detachment. Herds of cattle raise their startled heads in mute surprise at the invader. Horses swish their long tails and with ears erect make ready for a stampede. At intervals a golden cornfield flashes into sight, and a wagon drawn by a team of horses, carts sheaves for threshing. A crow, whose solitary habits were in keeping with the loneliness, idly flitted across the scene. Of other signs of animal life there were few. Prairie chickens found sufficient covering in the standing corn or sheaves to hide themselves from view. Gophers, po-ta-chi-pin-gwa-si, "the thing that blows up the loose earth," as the Saltaux Indians call them, were seen close to the railway cutting, reared on their hind legs and gazing in curiosity, as if daily intercourse with the new order of things had blunted their timidity. We were on the look-out for larger game, but saw nothing but a badger, which dodged behind loose stones and soon disappeared.

Calgary takes a place second only to Winnipeg. It has a population of 32,000, and has progressed so far in democratic principles as to municipalize its tram cars and electric lighting. It is an active centre of ranching and lumbering.



BOW AND KANANASKAS RIVERS 145

The railway journey takes the course of the Bow River, and a gradual ascent is made towards the mountain region. The Kananaskas River mingles its waters with that of the Bow a little further on, and the united force is concentrated in the roar of the Kananaskas Falls.

This waterway is drafted into service for purposes of irrigation as well as serving Calgary for the transportation of its lumber. Through the Gap there is a splendid view of the Bow River up-stream. The mountains on both sides lean across as if they were about to form a natural rock bridge, but stop abruptly as if they had suddenly changed their mind. A vulture flitted between them as our train sped by.

CHAPTER X

Prairie conflagrations—Outposts of the Rockies—Drab flats and purple crags—In the glacier track—Geological action—The Three Sisters—Between Canmore and Bankhead—The National Park—Surviving specimens of big game—Rundle Mountains—Minnewauka Lakes—Laggan—Lakes in the Clouds—The glacier region and its rivers—Hector monument—The Kicking Horse River—A great engineering feat—Douglas pines—Victims of forest fires—The Selkirks—The track of the avalanche—The Eagle River—The Fraser and Thompson—The Pacific—The flora of prairie and mountains—Vancouver—Shipping and trading.

ALL along the railway track a wide furrow is ploughed on both sides. Its object is to check the spread of fire caused by sparks from the engine. Prairie conflagrations are terrible scourges. Travelling between Calgary and Edmonton on my return, the sky was clouded with the smoke of one that must have been ten miles away. For hours we were within sight of it, the air was laden with the smell of burning. With a strong wind it travels at enormous pace, licking up everything in its way, and sending birds, cattle and wild beasts before it in mad flight.

It was early morning when the outlying ranges

AN . TAN . T.I.

of the Rocky Mountains came into view. Gradually they broke upon us, as if adapting themselves to eyes too long accustomed to uneventful flatness. intensifies her effects by contrasts. One thousand miles of flat are succeeded by one thousand miles of mountain, but it is difficult for the insular mind to grasp the meaning of it. Our familiarity with minute details is an indifferent preparation for things so vast, and here we have the plains and hills of England scaled up to the prairies and Rockies of British Columbia. Our faculties are not equal to it. We can no more see in thousands of feet than we can think in millions of figures-without practice. But nature trains us in her own way. She satiates the eye with the drab of a monotonous flat, in order to whet it for the purple of crags that "kiss high Heaven." And how cunningly she does it! In her hints, in foothills coming at intervals with prairie lying between. First bare rocks, then verdure-clad. followed by detached ranges, like stray notes and introductory chords to full-souled music. The murmuring of rivers is faintly caught in the distance to-day, which to-morrow will be heard in full-throated roar. Pioneer mountains prove to be only links in ranges which divide in clear-cut peaks amongst the clouds.

The solid stone and timber of the railway line rests on nothing less than the track of an ancient glacier which once crawled down the descent and discharged itself in thundering avalanche as its fellows do to-day.

Geological action can be clearly traced out in stratified rocks, some crushed beneath heavy burdens, others leaning as if a touch would topple them over into the abyss. In places deep ravines, in which mysterious shadows lurk, penetrate their sides; jagged crags, clean-cut and resplendent, crown their summits. The Three Sisters between Bankhead and Canmore are a conspicuous feature of rock formation. They stand equidistant, and rise to an altitude of nearly 10,000 feet. The valley was putting on its autumn tints when I saw them, and the young silver birch and poplar made a golden pathway up to the skirts of the White Maidens, which looked as if they had been just startled out of sleep. Hog'sback ridges rose between them, and a glacier river flowed at their feet. Between Canmore and Bankhead there is a National Park, where surviving specimens of the buffalo, once ubiquitous in the North-West, are to be found penned in, and, like their original masters the North American Indians, shorn of their wild romance. Bankhead is a favourite place to break the journey, and exploration may be carried on amongst the Cascade and Rundle Mountains, and Vermillion and Minnewauka Lakes. There is a comfortable hotel there, equipped with all modern conveniences, where efficient guides may be obtained.

Laggan is romantically situated near the Lakes



THE ROCKY MOUNTAINS MOUNT STEPHEN, 1 NO IIIII

in the Clouds, marvellous insets of water high up the mountain-side. Behind them, there is an extensive glacier region, source of some of the great rivers which irrigate the valleys of British Columbia. Verdure and fruitfulness spring up in their tracks. The principal are the Mackenzie, rising in the Great Slave Lake, which flows to the Arctic Ocean; the Saskatchewan, with its North and South branches; and the Columbia, which empties itself into the Pacific, south of Vancouver Island. The Valley of the Ten Peaks is one of the most beautiful in this mountain district. The latter shape themselves into a crescent round Lake Mordine, rearing their heads in pairs, with great snow-drifts lying between. The green tint of the glacier stands out distinctly against the dazzling snow and dark mountain bases.

Further north a monument is erected to the memory of Sir James Hector of the Palliser, 1858 Expedition, the first intrepid explorer of the Rockies. A more imposing monument calls to mind his distinguished services, in the colossal pile that bears the name of Mount Hector. The first president of the Canadian Pacific Railway Company, another celebrity, is honoured in the name given to Mount Stephen, which is separated from the Hector Range by a river. At this point the collective streams again separate into two branches, the one taking the Pacific Ocean direction, the other Hudson Bay. A deep gorge of

the Kicking Horse River is crossed where Hector's steed is said to have proved recalcitrant at the shock of the ice water in fording the stream. The finest piece of railway engineering of modern times has been accomplished at this juncture. The Canadian Pacific train enters a tunnel 3200 feet long and begins a gradual climb to a high level hundreds of feet above. It passes through a second tunnel, 2010 feet, which pierces Wapiti Mountains, taking curves so sharp that it is said an engine driver once pulled up before a red lamp, which he afterwards discovered to be on the tail wagon of his own train. Twice the Kicking Horse River is crossed, and when the highest ledge of the spiral cutting is reached, four rows of railway track can be seen rising in tiers above each other. The enterprise cost £300,000. the price, by the way, of the whole pile of Government buildings at Calgary. £50,000 were spent on explosives alone. The work was only completed in 1909.

When the line was first constructed, there was a very steep declivity at this point, by no means unattended with danger. Four engines were then needed to draw the train; only two are required now. When descending, under the old arrangment there was a series of side trackings, with switches for the purpose of diverting the train when the driver lost control. These tracks branched off the main line and slightly up-hill. On hearing the distress whistle



a man was ready to switch off the train and so prevent a catastrophe which might be terrible in its consequence. That danger is only a memory, and happily few were aware of it at the time. Now the gradient is reduced from 4.5 to 2.2, and risks have practically disappeared.

From the high level there is a wonderful sight of mountain valleys and yawning gorges. We passed close to the tops of Douglas pines, which vie with the rocky heights, and put forth all their strength to equal them in altitude. Larch and spruce, in themselves magnificent, are dwarfed into insignificance by their side. But everywhere amongst the dense forest, solitary dead trees stand stripped of every vestige of foliage, blackened and charred by destructive fires. There is a melancholy desolation about them, but the thick undergrowth of their progeny wraps them round, as if to hide their nakedness.

On the opposite side of the gorge rise majestically the Selkirks, their glaciers so near that the ice crystals dazzle. Deep in the mountain crevasses they are locked fast, until higher temperature releases them, when they plunge down in roaring avalanches that sweep everything out of the way. The deeply scored cliffs show where ice slips have taken place, and the clear passage where rocks and trees have been uprooted.

The railway cutting again dips into the valley,

and pursues its course along a narrow creek, between Macdonald and Tupper mountains. So close is the line that they rise in a sheer wall a mile high. Shelters are constructed at intervals to break the fall of the snow. They are comprised of huge blocks of timber, roofed over sufficiently to break up and divert the avalanche. Without some such provision these slips would prove a serious obstacle to locomotion, and trains would be constantly snowed up.

The watershed which the line skirts, divides and unites as obstacles intervene or are removed. The milky colour formed by the glacial silt sediment shows how much of its volume comes from the ice regions. Picturesque cascades are formed on the way, and foam-crested rapids, and now and again the roar of the pent-up river amongst the rocks echoes from height to height. The Eagle River divides into a number of branches, like the many pinions of the bird's wings, until through the wide-spreading valley it reaches Shuswap Lake. The Thompson similarly grows into the Kamloops.

The moon was rising over the water as we approached, and in the evening light gave an added touch of romance to the peaceful scene. The Thompson River finds a new setting in the famous cañon through which it flows. The mountains mass closer together, and their intimate features can be marked as the train passes along the ledge.

VICTORIA DOCKS, VANCOUVER



The eye fastens on colours rich and varied; brilliant green far down the valley, red loam streaking the banks, maple trees touched with premature autumn tints, shimmering water, and all overarched by a deep blue cloudless sky.

The Fraser joins the Thompson at the cañon, which throws wider apart its rocky banks as if to welcome the greatest of all the Columbian watersheds. The wear and tear of long travel stains it, and the Thompson's emerald tint is soon lost in its muddy, surging currents. For miles the train and Fraser run pari passu through Yale, Agassiz, and Harrison Mills to Westminster, where the river lags, and slowly as a tired giant quietly sinks into the open arms of the Pacific.

The great transcontinental line terminates at Vancouver, which in itself only marks a new starting-point for the shipping service to China, Japan, Honolulu, Fiji, and many other ports in the far-off Orient.

The prairies, arid though they appear, are not wanting in the adornment of floral life. Even as the train rushes by, patches of buffalo plants and grass may be seen. These are less abundant than when the buffalo trod the plains in great herds. The stamping of their feet hardened the ground, which together with manuring formed a more favourable environment. Near the foothills the dwarf creeping plants and the wormwood are seen.

Phloxes, cleomes, and phacelias mix their colours with thorny and grey-leaved shrubs.

Among the cañons and timbered slopes, brilliant castilleias lift their crimson bracts in adornment of the forest woodlands. High amongst the rocky crags Alpine flowers grow; the yellow-eyed purple prunella, the deep violet phacelia, a plant indigenous to the American soil.

Amongst the snow there flourish the circular-leafed yellow buttercup and the white globe flower, both of the crowfoot family. Amongst clusters of moss spring the little blue forget-me-not, with Alpine penny cress and yellow Iceland poppies. The flora of the Rocky Mountains, like its fauna, have much in common with the Arctic regions. Professor Asa Gray identified 102 distinct Arctic region species, 81 allied species, and only 14 peculiar to America.

Vancouver, incorporated in 1866, is one of the most English towns in the Dominion. There vehicular traffic keeps to the left, the rule in the Eastern provinces being the same as in the United States and the European continent generally.

Mail steamers run from its port to Nanaimo, San Francisco, and various ports on the coast. Its returns give it a prominent place among great Western cities. In 1908 they reached £36,616,689. Property in 1909 was assessed at £14,800,000.

The shingles and lumber trades and fisheries



A PERILOUS CLIMB ON MOUNT HOBBI E

	•		
,			

advertise themselves along the docks and railway stations in the city and vicinity. Foundry and steel works are carried on extensively. It is the centre of land speculation, and real estate offices are numerous in every street.

CHAPTER XI

British Columbia—Mineral products—Dr. Dawson's report
—Development—Gold—Vicissitudes of mining—Copper and
zinc—Percentages—The "Lucky Jim"—Marble quarries—
Portland cement—Petroleum—Demand for a government—
— Constitution—The Kootenay district—Lumbering—Yale
district—Railway extension—Lillooet—The climate—Through
the Yellow Head Pass—The Athabasca River—Brule Lake—
Roche Miette and Roche Suette—Sulphur springs—Pyramid
Mountains—Geikie—Moose River—Selwyn and Rainbow
Mountains—The premier of the Rockies—Lake Helena—A
steamboat on the rapids—The Naas Valley—The Skeena
Valley—Vancouver Island—Comox district—Minerals and
timber—Saw mills—Homesteads—Land Clearing and Irrigation
Companies—Gold medal award—Fruit.

THE area of British Columbia is estimated at 285,000 square miles. There are four chains of mountains traversing the country in a northerly direction with extensive valleys between. It is proved that each of these ranges is rich in minerals, whilst the valleys immediately to the west of the Rocky Mountains contain gold, which in some places is being worked with prosperous results.

The Rockies seem to the traveller to be the presiding deity of the place. Around, above, beneath, they are ever to be seen frowning, smiling,

raging and sighing by turn. If wealth be power, who shall approximately reckon the force of the treasure that lies slumbering in its breast? The creator of the fabled Aladdin might well have had his imagination fired in the heart of these wondrous ranges.

The late Dr. George M. Dawson, Director of the Geological Survey of Canada, has reported that gold is so generally distributed over the whole of British Columbia that there are few streams of any importance in which "colours" may not be found. Up to the present only 20 per cent. of the province is really known, and not half that portion has been sufficiently examined to ascertain its real value. What has been ascertained is that 300,000 square miles of country is extensively mineralized.

Development has been slow, owing to want of railway and road communication. For six years previous to 1893, the lode mines had only yielded about £12,000 annually, but in that year the output reached £60,000. This has been bettered in 1909, by amounting to £984,818. The geographical position of the province was in the past a hindrance to rapid development, and the markets for mineral wealth had been practically confined to the Atlantic shores. All this has been changed, and along the Pacific coast the complete progress of manufacture from the rough ore to the finished article is taking place, saving time and the expense of freightage.

The value of placer gold in 1909 amounted to £95,400, a falling off from the previous year. The decrease was attributed to unfavourable weather, which affects the gold harvest as well as the wheat. The mining of placer gold is controlled by the supply of water, depending at one time on the snowfall of the previous winter, at another on the rainfall of the spring. There is another factor, however; the more easily available deposits have been largely worked out, and others requiring larger capital and plant must be exploited. Again, fresh plant has to be reconstructed to meet new requirements, and an idle period intervenes. The bursting of a dam, which causes flooding and suspends work, defers the expected returns for periods more or less prolonged.

As might be expected, the vicissitudes of this kind of mining have to be coped with, and speculation has uncertain results. At times the excitement over a "find" is by no means justified by experience, at others hopes are realized beyond the dream of avarice.

The total amount of silver produced in British Columbia in 1909 was 2,532,742 ozs., valued at £247,854. The four divisions of the Slocan district produced about 50 per cent. of the total. The Fort Steele mining division contributed 23 per cent. Most of the silver is found associated with lead, the rest in copper-silver ores.

The lead comes chiefly from the Fort Steele

division, the remainder from the three divisions of Slocan district, the Nelson mining division and a few others. In 1910, the production amounted to 44,396,346 lbs.

The principal copper districts are the following: Yale, (Boundary division) Yale, (Kamloops) Rossland, Cassiar, Nelson, and the Coast. The amount produced in 1909 was 45,597,245 lbs., all fine copper, valued at £1,183,104. This, however, showed a decrease on the previous year of 1,677,369 lbs., or in money value £64,345.

The zinc industry has not been neglected, although the output is small compared with other minerals. The total amount produced in 1909 was 10,000 tons of ore, yielding from 38 to 48 per cent. of zinc.

The chief zinc mining district in British Columbia is at the "Lucky Jim" in Slocan mining division.

Platinum is found in many alluvial gold workings as a by-product. The process, however, involves so much labour that it has not been considered profitable.

An abundance of building stone of various sorts is to be found in almost every part of British Columbia. It is so plentiful and widely distributed that quarrying has not become much of an industry, except in the vicinity of large cities. A marble quarry has been opened in the neighbourhood or

Lardo-Trout Lake Railway in the interior. In 1909 blocks which were excavated and sawed into slabs, amounted to £6000 value. The Marble and Granite Co. used to ship the rough blocks for dressing. Works have since been established which supply the marble in the finished state.

Large lime-kilns are in operation in the neighbourhood of Victoria. This industry has been extended to Saanich Inlet and Texada Island, where the limestone used is of exceptional quality.

Portland cement has demanded the formation of a company at Vancouver. The works are about twelve miles from Victoria, at Tod Inlet on the Saanich arm. In 1909 the output was valued at £72,000.

Petroleum is still in the speculative state. The oil has been found in East Kootenay and in Vancouver Island, but it has not been sufficiently worked to form a clear notion of its value.

Concrete is so much in demand on the coast, that quarries have been opened and companies formed with extensive plant for crushing rocks and supplying washed sand and gravel.

This brief epitome of the natural resources of British Columbia is sufficient to show its importance as a province of the Dominion. Geographically it is the largest, prospectively it is without doubt the wealthiest.

Fifty years ago it was unexplored territory, unknown, except to its Indian inhabitants and a few



A NELSON APPLE-PREE

fur traders. When gold was discovered on the Fraser River in 1857, people began to pour into this hitherto isolated world. The demand for the establishment of some form of government control naturally arose. Accordingly the mainland west of the Rockies became a Crown colony and took the name of British Columbia. In 1871 it was constituted a province of Canada, on condition that it should be connected with the eastern territories by railway. The Canadian Pacific was completed in 1885, which opened 'up direct communication between the Atlantic and Pacific A lieutenant-governor is at the head of the Provincial administration, appointed by the Dominion Parliament. There is an Executive Council of five who are members of the Legislative Assembly, forty-two in number, who are chosen by the Provincial constituencies.

The Kootenay district lies in the south-eastern portion of the province, west of the Rockies, and within the region of the Kootenay and Columbia rivers. In consequence of its more advanced development, civic life is rapidly spreading. The population has more than doubled within the last ten years. Next to the mineral industries comes that of lumbering. The timber is floated down the small unnavigable streams, which also supply power for electric works, mills, etc. West of Kootenay, lies Yale district, rich in arable land and at the same time mineral

wealth and timber. Within its limits are the fertile valleys of Okanagan, Nicola, Similkameen, Kettle and Thomson rivers.

The Canadian Pacific runs through the heart of the district. A branch railway and lake route communicate with the south, whilst new lines are in progress, giving access to further undeveloped agricultural and mining districts.

Lillooet requires the advantages of railway transport; nothing else is needed to develop its natural resources, which are potentially great.

Westminster has the finest soil for cultivation in the province. It possesses all the advantages of irrigation from the Lower Fraser, which courses through its valley, stimulating its fruitfulness, as well as creating an extensive lumbering industry. A considerable portion of the Fraser Valley has been dyked, so supplying a still larger area for cultivation. The climate is mild, and there is a plentiful rainfall during the winter months.

Going north, the districts of Cariboo and Cassiar are traversed. Apart from the track of the great rivers the whole region is practically unexplored. Cassiar lies in the Peace River country between latitudes 64° and 60°. North and south of the river there is an extensive agricultural region. The southern area is principally prairie and poplar copse, with good soil. Early autumn frosts prevail. Cassiar has already yielded samples of good wheat, and there is every

MOUNT GEIKIE

reason to expect that a large population can be sustained by its natural products. The climate is good and adapted to the needs of successful agriculture. The wheat season is short, but certain in its harvest.

An agreement has been made with the Dominion Government for the laying down of railways in Cassiar. Three and a half million acres were ceded for this purpose. The completion of the Grand Trunk Railway, now in progress, and the laying down of good roads will hasten development, and the great hopes and possibilities of this hitherto trackless wilderness will be practically fulfilled. The route is via Edmonton, and extends to Prince Rupert on the British Columbia coast. It exploits a new territory, and opens a fresh volume in the sublimity and grandeur of the Rocky Mountains. It traverses the Yellow Head Pass.

Between Edmonton and the mountains, a distance of 125 miles, the survey shows grassy plains interspersed with wooded slopes. The line skirts the south side of the Athabasca River, which broadens from twenty feet at McKay, to nearly three hundred feet at Prairie Creek. Mountains 7000 feet high come into view at that point, and Jasper Park is touched, where the Dominion Government has formed a 5000 square mile reserve for the preservation of the magnificent specimens of flora and fauna life in primitive wildness.

Two hundred miles from Edmonton, Brule Lake is reached. It is an expansion of the Athabasca, and acts like a dock to the river, broadening it two miles wide further on. The mountains rise on each side of this waterway, culminating in the peaks of Roche Miette and Roche Suette. Snow-capped eminences are sighted further on, known as the Fiddle Range.

A peculiarity of atmospheric conditions attests the presence of sulphur springs. The odour can be detected half a mile from its source. Analysis has ascertained that these springs are from 111° to 127° Fahrenheit, and are said to possess important medicinal properties.

The Pyramid range of mountains, 9700 feet high, Jasper Lake, Fish Lake and Rocky River are within easy reach. The magnificent peaks rise in silent guardianship, and cast dark shadows over the water. The scenery is further varied by deep cañons with precipitous walls.

Two hundred and forty miles from Edmonton, the ranges of the Rockies are reached. Geikie is one of the principal, and marks the parting of the ways between the provinces of Alberta and British Columbia. At Yellow Head Pass, the great Fraser River is sighted with its numerous affluents. Born amongst the glaciers, it extends through the province of British Columbia, a distance of nearly 1000 miles. The Moose River debouches into it east of Moose Lake, and the railway crosses it by means of a bridge.



THE TÊTE FAUNE CACHE



Sixty miles further on, the Selwyn range of mountains is skirted north of Moose Lake. Its base is thickly wooded, its summit set in snow. Red and yellow colouring, the characteristic markings of the Rainbow Mountains, are easily recognized in that locality. But all these ranges are surpassed by the peaks of Mount Robson, which reach a height of 13,700 feet above sea-level. It not only holds the premier place in the Rockies, but is unequalled throughout the American continent. This mountain finds a fitting auxiliary to its grandeur in Lake Helena, silent in its depths as the towering peaks above. From Tête Jaune. Fort George can be reached by canoe. A steamboat made the reverse passage in July 1910 for the first time. It took six days to do the 80 miles' journey, owing to the force of the current. Below this point, the mountains give place to hills and wide fertile plains suitable for fruit growing and dairy farming.

From Fort George the proposed line stretches through Bulkley Valley to Hazelton, and thence to Prince Rupert.

The Naas River Valley is abundant in timber such as spruce and hemlock. It is navigable for forty miles, and at the point where this route ends, there is a ten-mile wagon road. A forward movement awaits only better transportation and more roads in the Skeena Valley. Its fruit-growing capacity has already been established. The Grand Trunk system is

projected to run along its banks towards Prince Rupert and also intersects Bulkley Valley, which has pasture land round Aldermere Lake of a light nature, good for vegetables and fruit. Other parts of this extensive valley contain resources for industry that in the near future will be developed.

Vancouver Island possesses all the natural resources in more or less degree that are distributed over the entire province. These include coal mining, copper smelting, quartz mining, lumbering, fishing, and such like. The railway of the Esquimalt and Nanaimo Co. runs from Victoria to Wellington through scenery as rich in beauty as in intrinsic worth. The Canadian Northern Railway, already on its way to British Columbia, has included amongst its extension a track through the island.

The agricultural regions are so thickly timbered that the railway company has arranged for the clearing of large tracks. The island is eminently adapted for the growing of grain, vegetables and the choicest fruits. The latter flourish best in the south.

In Vancouver and some of the smaller islands extensive deposits of iron have been discovered. The largest quantities contained in the province are found there, and the ore is said to be entirely free from sulphur and phosphorus.

The Comox district occupies the northern territory of Vancouver, as well as a part of the mainland. There is a stretch of thirty-five miles of fine

MOUNT ROBSON



!

ı

productive soil between Campbell River and Comox Bay. Minerals abound in this locality as well as timber. The latter consists of Douglas fir, cedar and western hemlock, probably unexcelled by anything in the world.

The Douglas fir takes the first place, and grows as far as 51° north, where it gives place to cedar, hemlock, cypress and spruce. The firs along the coast grow to the height of 300 feet, with a circumference of 30 to 50 feet at the base. This timber is of high commercial value and to it may be added white pine, tamarack, balsam, maple and cottonwood.

There are about 160 sawmills in British Columbia, and close upon £4,000,000 of capital invested in the trade. It has been increasing year by year. The demand for cutting timber has become so great that the Government have discontinued the granting of licences.

Pulpwood which is found along the ocean border supplies material for paper manufacture, and mills have sprung up for working it. Their position on the coast facilitates export trade with Asia and Australia. It is predicted that British Columbia will be in a position to furnish half the civilized world with paper in its numerous forms. It must not be thought that the vastness of British Columbia precludes the more concentrated human element in its industries. There are charming details in the form of pretty sheltered homesteads which might well

recall the agricultural conditions of Somersetshire and Hampshire in the days of the Stuarts—golden fields and ripe fruit alternating with the springing corn, and the blossoming orchards. The great difference, perhaps, that would strike the old-time English farmer, were his eyes to open on such scenes, would be the majestic mountains in the background over which the sun climbs at daybreak, and at evening

"Casts a lingering look of fond regret, Back to the hills where it has played all day."

But he would also distinguish the common denominator of all farm life, the lowing cattle, the browsing sheep, and nearer home the clucking of the conceited hen over her maternal efforts, and the gurgling squeak of the well-nourished porker.

Fertile valleys lie between the mountains throughout the province, containing the necessary elements for farm produce. A practical knowledge of irrigation enables the farmer to cultivate on a diversified scale. He can study the needs of the locality and adjust his products accordingly. There is neither excess in rainfall nor drought to handicap him.

General farming comprises grain growing, dairying, cattle and poultry raising, fruit and vegetable cultivation. Clover grows like a weed in this province, west of the coast range, and is a valuable fodder. The great ledges and terraces of the mountain-sides provide good pasture for cattle, and



THE "DIAMOND" HITCH FOR A STEEL BR CLIMB



horses can sleep in the natural shelters these localities afford.

Wheat is cultivated chiefly in the vicinity of the Fraser valley: Okanagan, Spallumcheen and in the Thompson River valley round Kamloops. So far oats is the grain most cultivated.

Root crops are prolific, especially at Chiliwack, and in the Okanagan district. These districts, together with Agassiz, are adapted to hop growing. The crop is disposed of for the most part in the British market. A new market is rapidly opening up in New Zealand, in consequence of the fine specimens sent to the international exhibitions in that colony.

Fodder crops chiefly consist of red clover, timothy, alfalfa, alsike, sainfoin and brome grass. All these thrive vigorously, and some of them yield three crops in the season. Hay gives on an average about $1\frac{1}{2}$ tons to the acre. Tobacco grows freely in the south. It often realizes $7\frac{1}{2}d$, a pound.

The success of flowering bulbs in the vicinity of Victoria, which is peculiarly adapted to this form of horticulture, has resulted in the establishment of a large business there. The profits recorded amount to as much as £400 per acre. Bee-keeping is naturally associated with horticulture. It is becoming an important branch of farming, as honey finds a ready market. It is evident that where flowers will grow in such luxuriant profusion, bees will thrive.

Two problems which heavily handicapped early

settlers are now being practically solved. The landclearing difficulty, which entailed much labour, and postponed the fruit of the soil, can now be effected by contract. Companies have been formed for this The cost per acre is considerably reduced purpose. by the disposal of the timber. The other question has been that of irrigation and dyking. There are several low-lying districts in the province which contain rich alluvial soil, but until an adequate dyking system has been established these lands are unwork-In the Fraser Valley 100,000 acres have been reclaimed by the Government, and are now ready for cultivation. In West Kootenay there is another tract of 40,000 acres, partly reclaimed, and already rewarding outlay.

In the higher grounds of the southern interior, irrigation on the part of individuals is well-nigh impossible. But a large portion of these lands has been taken up by companies who are parcelling them out and constructing reservoirs to ensure a constant water-supply. The result is satisfactory, and land is being quickly disposed of and cultivated to advantage. There remain yet many thousands of acres waiting to be reclaimed and turned into orchards and farms.

In cattle-rearing there are comparatively few of the very large ranches of earlier times. The modern method has greatly improved the quality of the stock. A Dairymen's and Live Stock Association imports



MOOSE RIVER FALLS

		•	

FRUIT 171

and sells well-bred stock to its members, and cattle raising, even on a small scale, is remunerative.

The southern half of the province contains at least 1,000,000 acres of land suitable for fruit growing. The Royal Horticultural Society's gold medal was awarded for a small exhibit in 1904. In 1905, British Columbian fruit took the first prize in London, besides winning medals. Strawberries yielded large crops, 4 acres producing as much as 28,126 lbs. Tokay grapes grow in the open, averaging 4 lbs. to a bunch. Plums, cherries, peaches, tomatoes, all do well. A cherry tree at Agassiz yielded 1000 lbs. of fruit. I know of strawberries being sold in the city of Vancouver last year at 6d. per pound.

CHAPTER XII

Growth of trade — Official returns — Great Britain—Canada—United States—France and Germany—Imports and exports—Attractions: for settlers—Capital brought into the Dominion—Increased cost of living — Government inquiry — Causes of the increase—Plain living and high thinking—Emigration Amendment Bill—Protests and criticisms—Lord Crewe's protest—Modifications of the Bill—Tariff and Reciprocity—Petition to the Government—The statement of the case by experts—Sir Wilfred Laurier's reply — A counterblast—The general election.

THE growth of trade in Canada has made vast strides, each decade showing a substantial increase on the previous one, and nearly doubling between 1900 and 1910. Taking the year 1870 as a basis, the march of prosperity is shown in the following official returns:

1870	•••	•••	total (trade	£29,677,565
1880	•••		"	"	£34,880,241
1890	•••	•••	,,	,,	£43,721,478
1900	•••	•••	"	,,	£76,303,447
1910			,,	"	£138,642,244

An analysis of the trade operations shows that the largest was transacted with the United States, being 49.70 per cent. Great Britain comes next with 36.16

per cent., the remainder is scattered over 70 countries. France comes third, her imports, consisting of grains, tinned fish, fruits, pulp and agricultural implements. Germany takes the fourth place with grain, tinned fish and fruit.

Making a further comparison during the past ten years, Canada has outstripped the United States and Great Britain, the figures being, Canada, 1899-1909 increase, 88'14 per cent.; United States, 55'19 per cent.; Great Britain, 37'81 per cent.

The rapidly increasing population of the Dominion, which has naturally stimulated trade, accounts for Canada's lead. The fact is an illuminating one, that, with the exception of the Argentine, the Dominion holds the premier place for trade increase in the world during the last decade.

Taking the trade per head the figures work out differently. Great Britain comes out top in 1909 with an increase per head in round numbers of £21, Canada, £18, United States, £7.

During the past four years, 1907-1910, the official returns show the up-grade of Canada's import and export trade:

IMPORTS

1907 1908 1909 1910 £74,565,073 £58,457,715 £70,392,402 £88,560,973

EXPORTS

1907 1908 1909 1910 £54,665,082 £54,000,941 £58,192,489 £59,770,054 The attractions of the Dominion for the young and enterprising of all nations have annually swelled the number of settlers. To this circumstance much of the rapid strides she has made must be attributed. Settlers have not come empty-handed. Many of them possessed sufficient capital to start advantageously; and, coupled with industry, the success of that class of emigrant was practically assured.

Official statistics show how widespread the influx has been. From 1897 to 1910, British settlers amounted to 600,411, European continent, 445,766, United States, 529,268.

Of capital and money effects it is estimated that in five years, 1905-1910, over £65,000,000 have been brought into Canada.

With the rapid growth of population and industries, the cost of living has greatly increased. Whilst this may be taken as symptomatic of the march of wealth, the rate of the rise in commodities has assumed such a high figure that the matter has been made the subject of official inquiry, and a report has been issued from the Government Labour Department of the Dominion.

In the year ending 1909, the cost of grain and fodder rose 49'9 per cent.; cattle, sheep and fowls, 48'6 per cent.; dairy produce, 33 per cent.; wholesale price of leather, boots and shoes, 35 per cent.

Agricultural products, both raw material and manufactured articles, show the greatest advance.

On the other hand, imported goods are lower than they were during 1890–1899. Mine products have only slightly increased, and if coal be excluded they are below the average. Sugar was only half the price it commanded in 1895, and tea was reduced from 2s. 6d. to 3s. 9d. per lb. to from 1s. $0\frac{1}{2}d$. to 1s. 8d. per lb.

These reductions have been regarded as an inadequate set-off against the inflated value of more important commodities. Bread has increased 46 per cent., wheat 75 per cent., and flour 60 per cent., house rental 25 to 30 per cent., clothing 25 per cent. Wages have advanced meanwhile, but not in sufficient proportion to balance the more costly housekeeping account.

The matter has been ventilated in the Press during the current year, and the acuteness of the discussion has been indicated in such pointed questions as the following: Why is meat double the price of twenty-five years ago? Why are eggs 300 per cent. higher? Why is good butter a luxury for the few? Why are other necessaries so inflated in price? Can anything be done to check the upward tendency? Are there not unnatural causes at work which are responsible for these conditions? Does the law of supply and demand sufficiently explain the phenomenal increase in the cost of living?

The answers of experts and Government officials vary, but on the whole give a fair statement of the

Increase in prosperity is the root factor that operates in increased cost. As one writer states, the trouble lay "not in the high cost of living, but in the cost of high living." The higher standard of life set up by the wealthy section of the community, by no means a negligible one in Canada, has diverted labour from the production of necessaries to that of luxuries, such as motor-cars, vachts, costly dress fabrics and luxurious commodities generally. The class which demands the best of everything, and will have it at all cost, has been a growing one throughout the Dominion. Mr. C. C. James, Deputy Minister of Agriculture for Ontario, regards this factor as such an active one in the higher prices of products, that he prescribes "plain living and high thinking" as the remedy. The rural population of Ontario had decreased, from 1,108,874 in 1899 to 1,047,016 in 1909, whilst in the same period the population of cities and towns had grown from 901,874 to 1,197,274. The effect on the production of the necessaries of life produced by these changes is obvious.

Local combines are another active cause in the greater cost of living. This can scarcely be eliminated, inasmuch as Canadian exports can be purchased in some cases at a lower rate in Liverpool than in Toronto, and agricultural implements made on the shores of Lake Erie command a higher figure in Calgary than in London.

United States trusts in meat and kindred commodities also affect Canadian prices.

Economic changes in the West through emigration have a direct bearing on the question. The rapid growth of New Canada has diverted trade in cattle to speculation in land. Huge ranches have been cleared in the interest of the incoming settlers. The scarcity of livestock in the United States has driven dealers to the Dominion market. They pay high prices, and the Canadian wholesale merchants are compelled to do likewise in order to hold their own with their neighbouring competitors. Some one has to pay back, and it naturally falls to the lot of Mr. Mackenzie King, Minister of the consumer. Labour, summarizes the causes of increased cost of living in Canada as follows:-

"I. Extravagance of the rich. 2. High standard of living among the masses of the people. 3. Increase in population, largely through emigration. 4. Increase in the supply of gold. 5. Large expenditure in public works. 6. Higher wages."

The economic law of supply and demand lies at the root of the whole question. Canada's increase of population has not been balanced by an equal increase in marketable commodities, either in kind or in skill. Labour is dear because labour is scarce. Where there is competition in supply prices right themselves. I was struck with this in connexion with the restaurant industry. The

system of boarding out largely prevails in Canada, not only for luncheon but for all meals, breakfast included. Apartments are let with practically no attendance, and even hotels quote separate terms for rooms and board. Many of the Vancouver restaurants never close day or night all the year round, and in the leading streets are extremely numerous. But the supply is equal to the demand, possibly exceeds it, with the result that although provisions are dear, dinners are cheap, and eighteenpence will procure quite as good a luncheon in Winnipeg or Vancouver as in the Strand or Cheapside.

Despite the loud complaints against increased cost, poverty has not so far showed its hungry teeth in the Dominion, and the "workhouse"—that pathetic symbol of civic decadence—has not yet made its appearance amongst its municipal institutions. The amended law in regard to emigration which has been recently introduced, has evoked protests from many quarters, as imposing undue restrictions. The proposals, which became law May 4th, 1910, are to the following effect:—

- 1. That each adult should be possessed of £5 in addition to a railway ticket, or a sum of money sufficient to reach a specified destination in Canada.
- 2. That the head of a family should have £5 for each member of 18 years and over, and £2 10s. for each member between 5 years and 18.

- 3. That between November 1st and end of February each year, these sums should be doubled.
- 4. Exceptions might be permitted in case of males already hired, and going to employment on farms, females to domestic service, or persons about to join relatives.
- 5. The regulations did not apply to Asiatics, who were required to possess £40 each, except in the case of emigrants from countries with which Canada might have special treaties.

These provisions caused considerable discussion in the Dominion Parliament. The reason for them was stated by the Minister of the Interior on January 19th as follows:—

"When the Act of 1906 was introduced it was framed with a view of dealing with emigrants from over seas. Although it applied to emigrants from across the line, it was especially framed to meet the other conditions. Now it has become necessary to make similar provisions for the exclusion of undesirables along the 3000 miles of frontier between Canada and the United States, that we formerly had carried out at the ocean ports. And as the Act was drawn with a view to applying at the ocean ports, it is necessary that it should be amended in its definitions and operations so as to clearly and definitely provide for the exclusion of undesirables who arrive in Canada by rail or by road. There has also arisen since the passage of the Act of 1906, the

question of Asiatic emigration. And while in that respect the Act does not require much change, still it has been thought desirable to provide for effectively dealing with that class of emigration, not so much by the introduction of a new principle, but to provide a specific means for the enforcement of that principle. This Bill also provides for relieving the situation as it at present exists, in which the Government has to exercise an arbitrary authority in the exclusion of emigrants. This Bill provides that under certain circumstances a Board of Inquiry shall sit and decide on the merits of the cases brought before it, a record of each case being kept."

Protests were made against the regulations by British emigration and charitable organizations generally. A statement was contributed to "The Standard" by Lord Strathcona, which sought to soften the asperity of the restrictions by the assurance that they were only directed against an unsuitable class, upon whom it was desirable that a check should be imposed.

The Canadian Manufacturers' Association opposed the Bill as seriously restricting the importation of artisans. A portion of the Canadian Press joined in the outcry, indicating the shortage of labour in manufacture as a strong reason against the barring of artisan labour, which was as essential as farmers to the well-being of the country.

The regulations received support from other

quarters, but a protest from Lord Crewe had considerable weight, and led to some modification in the Bill. Of the terms contained in this memorial from the Colonial Secretary particulars were not published. As the outcome, the Canadian representatives in great Britain were intrusted with large discretionary power in dealing with emigrants other than the farming class, who had the prospect of work on landing in the Dominion.

The question of tariffs has become a burning one in Canada. In December 1910 a deputation of over 1000 western farmers waited on the Dominion Government at Ottawa. A considerable number of the farming class from Ontario, Quebec and the maritime provinces joined the delegation. Indirectly the deputation was the outcome of organized associations, banded together in pursuit of common agricultural interests. Directly, the speeches of Sir Wilfred Laurier, during his western tour and pending reciprocal relations with the United States, led the farmers to definitely formulate their demands. These were embodied in a series of resolutions endorsed by the National Council of Agriculture of which the following is an epitome:—

- 1. Urging the Government to acquire and operate public utilities under an independent commission.
- 2. To erect the necessary works, and establish a modern and up-to-date method of exporting meat.

- 3. To obtain ownership and public control of the Hudson Bay Railway.
- 4. To amend the Railway Act in certain particulars.
- 5. Urging Reciprocity with the United States, and the reduction of duties on British goods.

Papers were read on these subjects, but the discussion most vital and interesting followed on the question of Reciprocity and duties.

Tariff was described by Mr. J. W. Scallion, President of the Manitoba Grain Growers, as "a great burden upon the agricultural industry and the great body of consumers."

The delegates representing the agricultural interests of Canada, and the mass of the common people, "strongly protest against the further continuance of a tariff which taxes them for the special benefit of private interests. They say that this is wrong in principle, unjust and oppressive in its operation and nothing short of a system of legalized robbery. Prices for the produce of the farm are fixed in the markets of the world by supply and demand and free competition when these products are exported, and the export price fixes the price for home consumption; while the supplies for the farm are purchased in a restricted market, where prices are fixed by combinations or manufacturers and other business interests operating under the shelter of our protective tariff."

The speaker was in favour of reciprocal relations with the United States, but more than Reciprocity was needed.

"We are in favour," he said, "of an increase to 50 per cent. in the British Preference, and in favour of further increase from time to time until the duty on British interests is entirely abolished."

Mr. E. C. Drury, Secretary of the National Council of Agriculture, advanced as an argument in favour of fiscal changes, the decline in agricultural interests—the farming community had decreased in every Canadian Province east of Manitoba, and that Protection was no longer needed to encourage infant industry. He advocated British Preference, and ultimate Free Trade with England.

An argument on the effect of taxation upon agricultural implements was advanced by Mr. R. Mackenzie of the "Grain Growers' Guide." Agricultural implements manufactured in Canada, according to the last census, amounted to £2,567,149. Of that amount £468,565 worth was exported. The imports that year amounted to £318,962. "It is now conceded," said Mr. Mackenzie, "that the manufacturer adds to the selling price of his commodity the total amount of the protection granted him by the customs duty. The farmers of Canada thus paid to the Government that year £63,736, and to the manufacturers of farming implements £419,676.

A similar case was urged against taxation of woollens, cottons, leather, cement, and cutlery, which paid to the Government £197,831, and to the manufacturer £2,455,429.

In 1905 upon the sales of Canadian manufactures amounting to £141,200,000 a tribute was collected from the consumers of £38,000,000.

The demands on fiscal changes were formulated as follows:—

- 1. "That we strongly favour reciprocal free trade between Canada and the United States in all horticultural, fuel, agricultural, and animal products, spraying materials, fertilizers, illuminating and lubricating oils, cement, fish, and lumber.
- 2. "Reciprocal trade between the two countries in all agricultural implements, machinery, vehicles . . . and in the event of a favourable arrangement being reached it be carried into effect through the independent action of the respective governments, rather than by the hard-and-fast requirements of a treaty.
- 3. "We also favour the principle of the British Preferential Tariff, and urge an immediate lowering of the duties on all British goods to one half the rates charged, . . . and that any trade advantages given to the United States in reciprocal trade relations be extended to Great Britain.
- 4. "For such further gradual reduction of the Preferential Tariff as will ensure the establishment of

complete free trade between Canada and the Mother-land within ten years.

5. "That the farmers of this country are willing to face direct taxation in such form as may be advisable to make up the revenue required under new tariff conditions."

Sir Wilfrid Laurier's reply was guarded. He expressed surprise that Eastern farmers should have joined Western in the petition. With the principle of some of the demands he was in sympathy, but with the question of the nationalization of railways and public utilities he kept an open mind.

With regard to Reciprocity the Government wanted better commercial relations with the United States, but "any change in trade relations" with regard to manufactured products was a more difficult matter, and "Nothing we do," he stated, "shall in any way impair or affect the British Preference; that remains a cardinal feature of our policy."

The Toronto "Globe," the Liberal organ, regarded the movement set afoot as destined to affect the entire fiscal question. The growth of the West was so rapid that in a dozen years it would be in a position to dictate the fiscal policy of the Dominion, and to ignore it would be folly.

The St. John's "Standard," a Conservative journal, sought to discount the value of the memorial by stating that the arguments were stale and nothing

more than a repetition of those used by Sir Richard Cartwright and the Liberals in the 'eighties.

Other criticisms were to the effect that the deputation only represented 25 per cent. of the Western farmers; that the proposals meant diverting the trade of Great Britain to the States, and that the entire movement was of a class character. As might be expected, a counterblast came from the Canadian Manufacturers' Association, which charged the Western farmers with ignoring every one but themselves; that Canada had become united and strong under moderate protection, and the movement was controlled in the main by "New Canadians," unacquainted with the history or the aims of the Dominion.

Mr. T. A. Russell, of the Toronto Cycle and Motor Co., pointed out that Canada had been unfairly treated by the United States.

"For the past ten years," he said, "our purchases from the United States were £320,000,000. Their purchases from us were £160,000,000. They are twelve times greater in population. In other words, our purchases from the United States were £6 per head, theirs from us 4s. 6d. per head. The United States average tariff on all goods, dutiable and free, is 24 per cent., ours 16 per cent. Theirs on dutiable goods, 42 per cent., ours 27 per cent." He urged that Canada's natural resources would be wasted instead of conserved, and that its seaports would be

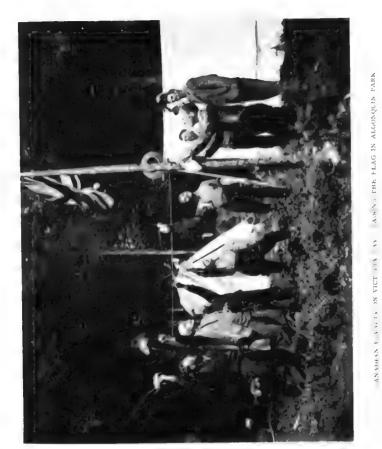
sacrificed to those of New York and Boston. Indirect taxation affected farmers less than other classes, whilst direct taxation would be correspondingly heavy, and all this in view of the fact that farmers were doing well.

"Our Western country is being filled up as fast as we can assimilate the additions. Railways are being constructed, our factories are busy, our country's credit never stood so high. And what of the farmer? In the West he has grown rich in a decade; in the Niagara Peninsula his land values have increased tenfold; throughout Canada he gets 50 per cent. more for his grain and fodder than he did a decade ago, 48 per cent. more for his meat and 35 per cent. more for his dairy produce, and this at a time when the cost of manufactured goods has, as a whole, remained stationary or decreased."

Before the above particulars had gone into type the result of the Canadian elections came to hand. The Liberals fought the battle on the question of Reciprocal Relations with the United States, and they lost, and lost heavily. Thus the long tenure of Government under Sir Wilfrid Laurier comes to an end, and determined by an issue on which he confidently expected to secure a following that would reinstate him in power. How far the result was determined by the fiscal question per se, or the larger issue of a fiscal alliance with the United States which might become the thin end of the

wedge to a Republican alliance, are matters that are open to debate.

Of one thing I was deeply impressed during my travels, namely, the intense loyalty of all classes to the British Crown, and if, as is surmised by many, the election was determined by an ultimate question of "Under which Flag?" the result will be by no means a surprise to any one who understands the passionate allegiance of the Dominion to the Mother Country.





CHAPTER XIII

Women's organizations—Christian Temperance Union—National Council of Women—A suffragette echo of Westminster—The recognition of women in the State—Clubs and societies—Socialism in the Dominion—"Seizing the reins of power"—The unfurling of the red flag—The safety valve of democracy.

OMEN'S organizations have rapidly developed in Canada. There are no less than twenty-six throughout the Dominion, many of them of great numerical strength, such as the Ontario Women's Institute, which numbers 16,000 members and has 600 branches.

The Women's Christian Temperance Union has a general organization for Canada, and an affiliated society in each of the provinces. Distinctly religious interests are fostered by seven missionary societies connected with the various Churches.

There is a National Council of Women, which held its annual meeting at Halifax last year. Its outlook is broad and its criticisms trenchant. Strong resolutions were passed in connexion with current topics. It has a standing committee on employment for women. Reports were received from its committees on all subjects affecting the feminine community. At its last meeting a committee on white slave traffic gave a report with startling details. It petitioned the Government for the appointment of women on the Royal Commission on Technical Education. Care of feeble-minded women and children was discussed, and minor details included the harmfulness of many theatres and cinematographic displays.

The council declared in favour of Women's movement which received support Suffrage, a from many of the branch meetings, including the Women's Christian Temperance Union of Manitoba. This movement has been widely discussed and obtained many supporters. The Toronto "Globe," the leading Liberal paper in Canada, threw its columns open for the discussion of the subject in the early part of the year. A decided majority favoured the suffrage, the main contention being that women knew the women's problem best and were qualified to influence legislation on the subject. European methods of advocating the movement were adopted in the Ontario Legislature in the spring, and an echo of St. Stephens, Westminster, was heard, when a woman rose in the gallery and said-

"There is one thing you have forgotten in your deliberations, and that is justice to women. I hope that at your future meetings you will give more attention to the cause of women. That is all I have to say."

The interrupter was Miss Olivia Smith, said to be an Englishwoman. The incident occurred as the session was about to be closed. She escaped from the House unmolested.

Canada is by no means insensible to the worth of its leading women. Sex is not likely to prove a disqualification where merit is concerned. The Dominion Government has appointed Mrs. Willoughby Cummings, Secretary to the Women's National Council, to a Government Office. King's College, Windsor, conferred on her at the same time the degree of D.C.L.

The influence of women on education and their fitness for managerial service is further attested by the appointment of three women to the Senate of the Toronto University, namely Winifred W. Leisenring, B.A. Margery Curlette, B.A., and Augusta Stowe-Gullen of Toronto, appointments which had hitherto been unprecedented. Paris has gone to Toronto for the selection of a distinguished woman, Miss Helen MacMurchy, M.D., to serve on the Permanent International Committee of the Hygiene Congress, Paris.

There are also a Women's Canadian Historical Society, a Household Economic Association, an Alexandra Club, and a Press Club with several branches.

Socialism has gained considerable hold on a section of the Canadian people. The principles of the

advanced wing, of whom the Marxians are the type, do not so far bulk largely in the propaganda of the movement.

I was present at a meeting in Vancouver, which was held on a Sunday evening in a large music hall, and was well attended. It is difficult to judge status by dress in the Dominion, as there is a uniform air of well-to-do-ness about all classes. It was quite evident from a glance at the audience that it was not comprised of those who espouse Socialism as a possible solution of problems of which they are the immediate victims. Many of them were in evening dress, and the occupants of boxes at the sides of the building, which included ladies, looked as if economic laws had not dealt unkindly with them, Socialism or no Socialism.

After the lecture, questions were invited, which served to elicit the principles of the speaker more clearly than his address. Amongst other things he was opposed to sending social representatives to the Dominion Government, and expressed the pious hope that if such a thing were to happen he would not be alive to witness it. Strangely enough, he had no objection to the Socialist being represented on local bodies. His aim was "to seize the reins of power," and this point was laboured at some length. Questioned how this was to be done if the Socialists remained unrepresented in Parliament, the lecturer became vague and declined to give a clear answer.

It was evident that many amongst the audience were against this phase of the movement. Pressed on the point as to means, he replied pictorially that when he left the platform and passed through the door, he would not go round the table, zigzag, or take the opposite direction, but go straight for the door.

His cross-examiner was on his feet again. He accepted the figure, but even to reach the door, aeroplanes not being available, some steps were necessary; what were they?

The chairman prudently came to the lecturer's relief by declaring the meeting closed.

The form of Socialism that receives most support in Canada is the municipalization of essential public commodities instead of capitalizing them. This, as has been pointed out, is the policy of many associations. A large meeting held at Ottawa was addressed by a clergyman who instanced the cases of education, tram-cars, and the post office, as in consonance with the principles of the best Socialism. He had no hope that the Pulpit, the Press, or the rich men would further the cause; it was for the workers to emancipate themselves. In his judgment Socialism created family life and capitalism destroyed it.

Other sections emphasized a more extreme form of the movement. In Montreal the red flag of Socialism was unfurled and the Bible exploited to show that class distinctions are the curse of ancient and modern life. Capitalists and employers were freely

denounced. On May Day a meeting was held in the same city, which was addressed in English, French, and Yiddish. A large proportion of the community consisted of Russian Jews. A procession of over 4000 marched through the city of Winnipeg on the same day, and resolutions were carried in denunciation of the capitalist class.

A Social Democratic party has been founded during the past year, making Toronto its chief centre. It is co-operating with labour organizations, and is avowedly socialistic. A meeting was held in Toronto, and one of the speakers is reported to have said—

"The unrest in the world is caused by the robbery of the working classes by the capitalist class. The remedy is to stop the robbery and to give the toilers a fair share of the wealth they produce. The Churches have no live message for the workers of to-day; all sects alike cater only for the wealthy; the poor and needy are not wanted. Instead of trying to uplift those who are fallen by the wayside, or who are distressed, they shun them."

The usual contradictory positions incidental to extreme views on economics naturally evolve. One leader gave an address on "Why a Socialist cannot be a Christian," and prophesied that the in-coming of Socialism meant the obliteration of Christianity.

Another claimed that Christianity and Socialism were identical, and urged working men, contrary to the Vancouver lecturer, to get the functions and

machinery of government into their own hands. The elaboration of the argument was as follows:—

"The machinery of production would then be transformed into the collective property of all. All would then take their part in the production and would have the right to consume to the full value of their production, and modern wage slavery would become as extinct as the earlier forms of chattel slavery and serfdom."

An American statesman remarked at a socialistic meeting in Canada that the plutocratic class in the United States mustered 9 per cent. of the population and possessed £13,400,000,000, or 70 per cent. of the wealth; the middle class numbered 21 per cent. of the population and held £4,800,000,000, or 25 per cent. of the wealth; that the lower class numbered 70 per cent. of the population and owned 5 per cent. of the wealth.

Without entering into the merits of the question, Socialism and the free expression of opinion on that and other questions proved the strength and stability of the Canadian Government. It recognizes that freedom of speech is the safety valve of a great democracy; that these public discussions exhibit the strength and weakness of every movement. If there are elements of good sense and sound logic in the arguments, it is for the good of the State that they be, as far as practicable, embodied in the statutes of the land. If they are weak, unpractical, it needs but the light to

kill them. Freedom of speech is the antidote to secret societies. Even the Russian in Canada, to whom this liberty is extended in common with other citizens, learns how to use and not abuse it. The attitude of the Government is further illustrated in the appointment of public servants from the class supposed to consist of such inflammable material. A well-known local Socialist at Toronto was selected last year to serve on the Royal Commission on Technical Education. He was a member of a body holding advanced views, in the opinion of some, inimical to the welfare of the State.

CHAPTER XIV

Game fish—Variableness of the season—Primitive methods of angling—Salmon species—A thousand miles' swim—The cohoe—The sockeye—The humpback—The dog salmon—Trout species—The common trout—The steel-head—The Kamloops—The Great Lake trout—The Dolly Varden—Brook trout—Distribution of salmon and trout—Angling reaches—Death of salmon after spawning—Theories—Fly and spoon bait—Fishing rods—The course of the Fraser River—The Coquihalla and Hope rivers—Angling on the Harrison River—My Indian guide—Scepticism and faith—A fight with a twenty-five pounder—The Harrison described—A second captive—Invoking Adjidaumo—His blessing on a twenty-six pounder—A visit to the Harrison Rapids—The cohoe run.

AME fish are plentiful throughout British Columbia. The rivers and lakes vary in their seasons, and a long and fruitless journey may be made by rail or canoe, only to find that the visit is ill timed. Water good in the spring is worthless in the autumn, and vice versâ. A good deal of valuable time might be saved if reliable information could be obtained on these points. I found it extremely difficult to get any, as good anglers are by no means plentiful in the province, and it is so vast that the information is generally confined to a local, and therefore a circumscribed, area. The primitive

methods of angling that prevail in the Dominion generally are a further obstacle in the way of hints that one angler is always ready to give another. A man who is an expert with a hand line is not necessarily an authority on rods and a trout's taste in patterns of Ephemeridæ; an Indian skilled in the use of a spear does not constitute a guide in the choice of favourite pools where the light impact of a fly brings the sweep of the broad tail of a resting fish. Dynamite and dry flies do not harmonize, and to such base uses one finds the magnificent trout and salmon subjected in out-of-the-way places. Fortunately the angling instinct serves in deciding where to fish, and it is often superior to the kindly but ill-judged advice that one listens to politely and prudently ignores.

There are five species of salmon in British Columbia waters. The spring salmon, the cohoe, the sockeye, the humpback and the dog salmon. So far only two out of the five have been known to take any angling lure, and it is the general opinion that only the spring salmon and the cohoe are game fish. The former is widely distributed. It is known in California as the quinnat; in Alaska as the tyee and king, and in Oregon as the chinook, or Columbia. It is the Oncorhynchus tschawytscha of Walbaum, the naturalist. From a commercial point of view the spring fish is regarded as the most valuable of the salmon species. In shape it is short and thick, with a small head of metallic lustre, growing sharp towards

the snout. The anal fin has 16 rays. There are 15 to 19 branchiostigals and 23 gill rakers. The tail is forked, with black spot markings, which also cover the dorsal and adipose fins. The back has a bluish tint, becoming silvery below the middle; the scales are very small, numbering 135 to 155 in the lateral line.

In spring its flesh is red and rich, becoming paler as the spawning season approaches. As the season advances the fish becomes so dark that it is called the black salmon. It is said to run to 100 lbs. weight. One was caught with the rod in the Campbell River in 1897 by Sir William Musgrave that weighed 70 lbs. There is a plaster cast of it in the Victoria Museum.

They run up the river in spring and summer, travelling in some cases a distance of over a thousand miles to the spawning beds on the far inland streams.

The cohoe (Oncorhynchus alias Kisutch) is a much smaller species, running up to 10 lbs. weight. It has 14 rays in the anal fin, 13 branchiostigals and 23 gill rakers. It has 127 scales in the lateral line. It is a silvery fish, with greenish-tinted back and iridescent hues when taken in the salt water. In appearance it resembles the grilse of the European Salmo salar. It is small-headed and well shaped.

The sockeye salmon (Oncorhynchus narka) weighs from 3 to 10 lbs. There are 14 rays in the anal fin, 14 branchiostigals, and 32 to 40 gill rakers.

The scales are small, numbering from 130 to 140 in the lateral line. The tail is narrow and well forked. The back is blue-tinted, running to silver below the lateral line, giving the fish a handsome appearance. During the spring season it undergoes a complete change in colour. Its sides grow carmine, and the head and tail change to deep olive green.

The humpback (Oncorhynchus gorbuscha) becomes hogbacked in the autumn to a degree of malformation that accounts for its name. The scales are very small, 180 to 240 in the lateral line. Black spots cover the back and fins. It has 15 rays in the anal, 12 branchiostigals and 28 gill rakers. It has a bluish-tinted back and is silvery beneath. It weighs from 3 to 6 lbs. It grows darker in shade towards the back; the head is pointed, and the upper mandible crooked like an old cock salmon.

The dog salmon (Oketa) is from 10 to 12 lbs.; 14 rays in the anal, 14 branchiostigals, and 24 gill rakers. Its scales are much larger for its size than the spring fish, 150 in lateral line. The head is longer but not so sharp. When taken from the sea the dog salmon is a dark silvery tint with black fins. In the river it turns dusky, and the sides grow red, the head becomes distorted, and the front teeth grow large and dog-like in appearance, which accounts for the name.

There are five or six species of trout. Points of differentiation in some cases are so slight that a

distinct species is questionable. Taking the natural history as we find it, the following is the classification: The common trout (Salmo naykiss). The steel-head (Salmo gardneri); the Kamloops (Salmo Kamloops); the Great Lake trout (Cristvomer namaycush); the Dolly Varden (Salvelinus agassizii); and the brook trout (Salvelinus fontinalus). The steel-head is very like the European salmon. It is migratory and spawns in the rivers, and like the latter returns to the sea. It runs up to 20 lbs. in weight. It frequents the mouths of rivers, but is also found in lakes. In the Okanagan and Kootenay lakes the steel-head is said to remain without returning to the sea.

The Kamloops trout is classed as another species, but many naturalists confess to the difficulty of differentiating it. Its scales are much smaller than those of the steel-head, and it is marked with diminutive black spots almost absent from the latter. The caudal fin is broad and forked, the dorsal is set rather low on the back. Its tint is dark olive on the top, bright silvery below the middle, with a broad light rose-coloured band. The back is covered with pin-head black spots, becoming more numerous posterially. The dorsal and caudal are thickly covered with these marks, but few are found on the adipose, and the lower fins are quite plain.

The Great Lake trout is spotted with grey, its body covered with thick skin. It runs to a large size and averages 15 to 20 lbs. It is found in the great

lakes from New Brunswick to Vancouver. At certain seasons of the year it grows almost black.

The Dolly Varden's body is slender, with a large head and broad snout. The caudal fin is slightly forked, and its sides are an olive tint marked with round red and orange spots. The back is similarly marked, but with smaller spots. It is of the *Charr* genus.

The brook trout has a large head; the pectoral and ventral fins are particularly elongated. It is a dark olive colour with mottled or barred markings. It has red spots on the side, and the dorsal and caudal fins are mottled with a darker tint.

Salmon and trout are widely distributed over British Columbia. The Fraser, Columbia, Thompson, Kootenay and Skeena rivers are the main water-courses by which the salmon ascend to their far-distant spawning beds. The tributaries of these rivers are equally well stocked, and for sporting purposes are in many ways superior to the main watersheds. An idea of the quantity of the salmon may be gathered from the fact that the returns from the industry amount to from £600,000 to £1,000,000 annually.

There are also extensive lakes, such as Kootenay, Okanagan, Quesnel, Shuswap, Harrison and innumerable minor basins, which form the habitat of fish.

From the angling point of view, the lower reaches, the mouths of the small rivers, the creeks and tideways, are the favourite places to obtain sport. When fish travel a long distance inland they are becoming heavy with spawn, and the deteriorating stage begins. If they take any lure then, there is no fight in them, and as a sporting entity they are worthless. As a comestible they are even less valuable.

Of the great shoals of spring fish that press up fierce rapids and are battered against sharp rocks, none are said to return alive. Ichthyologists find an analogy between them and the Ephemeridæ which die after they deposit their eggs. The immense quantity that float down the rivers after the spawning season gives plausible ground for this belief. The rivers are glutted with dead fish, so much so that the effect in places is almost pestilential. It is beyond doubt that a large proportion of the fish perish, probably all that have travelled long distances—a thousand miles for instance.

On the other hand, it is impossible to say whether those spawning nearer the coast perish in the same way. I saw excellent spawning ground below the rapids of Harrison River, which is quite near the coast, and reasoning from analogy there is little doubt that spring salmon spawn there. Salmo salar of European waters survive spawning, and it is in keeping with the fitness of things that British Columbian spring fish, which are larger and stronger, should, apart from accident, also survive. It would be interesting to ascertain whether the fish that

choose the coast spawning ground die like their more adventurous companions that make for the heads of the rivers. The whole subject needs more careful investigation.

Mallock's theory—that salmon that have spawned are spotted on the gill covers, and in support of which he gives corroborative if not conclusive data-might be easily applied to the fish netted in the Fraser and other rivers. Mr. John Pease Babcock, Provincial Commissioner of Fisheries in British Columbia, in discussing the incredulity of Atlantic and European authorities, says that they did not generally know that the Pacific salmon was not identical with Salmo salar, which returns to the sea after depositing its spawn. That statement scarcely disposes of the matter. The spring fish caught in the rivers of the province up to 70 lbs. weight must, on Mallock's theory, be from 15 to 20 years old. is difficult to reconcile the fact of a fish going all those years without discharging the natural function of its kind.

It may be laid down as a general rule for angling purposes, that whenever there is a river flowing into the sea, salmon will frequent it. As the British Columbian coast extends 7000 miles, and the rivers are legion, the opportunities for the indulgence of the rod are numerous. There are conditions, however, essential to good sport, which must be borne in mind. Some rivers, like the Fraser, are too highly coloured



FRASER CAÑON. CARIBOO JOE TUNNEL

for the use of fly or bait. A glance at the river from Lytton to Westminster gives indisputable proof of this. The Canadian Pacific Railway keeps close to it all the way, and at no point does the water grow clear, owing to thick glacial deposits. The colouring makes it all the more prolific for net fishing.

There are, however, important tributaries which are clear and in good order for the indulgence of the angling craft. The fish soon leave the main river and press their way up these all along the coast.

I sailed up the Fraser many miles, and although on the look-out for salmon, which were running at the time, I saw none breaking the water. The moment we entered a tributary where the water was clear they were to be seen rising all round us.

Another condition to be noted is the depth. The main rivers are very deep, especially when they reach the low-lying valleys and are nearing the sea. Fly-fishing in such places is out of the question. Salmon that take the fly are generally found in pools in comparatively light water, where they rest for a day or two on their long journey. It is on these the angler depends for sport. The running fish rarely takes any lure. Among the boulders and swirling eddies, one instinctively looks to find him. There, sheltered behind the big stones which break the force of the water, the fly is likely to attract. Even spinning or trolling is not very profitable in the great depths unless one happens to cross a resting fish.

In a clear river such as the Galway in Ireland, where the movements of salmon can be studied, a fly covers the quarry many times before he takes. He can be seen raising his head as it crosses his resting-place, moving off a little and returning to the same spot again, as if irritated by its persistence, and at last shooting towards the top and seizing it.

The only bait that can be seen in the deep Canadian rivers is a large spoon or minnow, which sinks deeply and flashes vividly. The charge brought against the Pacific salmon of not taking the fly should by rights be laid against the nature of the river.

The best rod for the purpose is a regular spinning or trolling pattern. It should be about 11 feet long, and supple enough to control the movement of the fish without breaking the tackle. A four-and-a-half-inch diameter check reel, capable of holding from 120 to 150 yards of fine silk line is needed. Green-heart, carefully tested, is suitable material, or the very best built cane. Both of these I included in my out-fit. I was also provided with a 16-feet cane salmon fly rod, Hardy Bros.' "Connemara" pattern, and a Houghton 10-feet fly rod for trout, by the same makers.

The Fraser River flows through the great Cariboo and Lillooet districts, into which several broiling creeks empty themselves. Of these Alkali, Dog, Canoe, and Big Bar creeks are the chief. Fish Lake, from which Canoe flows, is suggestive of piscatorial

A FRASER CANON. HELLS GATE

resources. North Fork joins it above Lillooet, and Seton Lake and Cayoose River below it. The ample volume of Kamloops Lake and River debouches into the Fraser at Lytton, and there are numerous creeks between that and Keefer on the Canadian Pacific Railway, such as Skuppa, and Neklipium.

Salmon River, below Keefer, is a short spawning stream, but too far off the coast to hold clean fish. The Coquihalla River at Hope is more promising, the distance to the sea being under 70 miles. It is a fine sweep of water, intersected with creeks, at the mouth of which there are good angling pools. The principal tributary of the Fraser is undoubtedly the Harrison River, 45 miles from the sea. At the rate which salmon travel it is only about a day's journey from Westminster.

The Harrison rises in the lake of the same name. 6 miles from the Fraser. The lake itself is about 25 miles long. It is fed by the Lillooet Lake and River.

I stumbled on the Harrison on my way up the Fraser, and à propos of the paucity of information. no one seemed to know anything about its angling qualities. It is as broad as the Thames at Hammersmith, beautifully wooded, with peeps of mountain ranges, some of them snow clad. A steamer plies between Chiliwack and Harrison Mills, passing through the Fraser Cañon.

As soon as the boat turned into the tributary, I

noticed salmon breaking the water in various places. Two Indians in a canoe were drawing a drift net, but the boat rounded a promontory before they made a haul. There were local men on board the steamer belonging to Harrison Mills and Chiliwack, and I made the round of them in the hope of obtaining information on the angling. Trout could be got in the rapids, a few miles up the river, but salmon would not take any lure. That was the sum of the information obtained. I tried the captain, but drew another blank.

On landing at Harrison Mills all aspirations to mount my rod and try my luck were discouraged. Nobody, it would seem, had cherished ambitions of the kind before. There was an Indian settlement on the river, and I made my way towards it. A squaw informed me in broken English that the "braves" were away hop-picking. I explained my object, and was directed to a shack lower down stream. There I found an Indian in the antepenultimate stage of dressing, who bundled on a jacket, and came forward to answer my questions.

"Any salmon fishing on the river?" I asked.

"Yes, with a net," he replied, eyeing the rod in my hand, as constituting part of the question.

"Won't they take a spoon-bait or fly? You see them rising," I added hurriedly, noticing his lips beginning to shape a "no"—but it came all the same. "Why not?"

"These big fish take no bait in this river," came again the emphatic declaration. "We can net some," he said, as a concession to the disappointed shrug of my shoulder.

"Look here," I said, "I have three hours before my train goes. Take me out for that time. I will make it worth your while."

"Yah, sure! but we'll catch no fish. How will that suit you?"

"Never mind, you won't lose anything by it."

We started in a light boat, and I mounted a 2-inch spoon, gilt on one side and silver on the other, using a strong gut trace with a light sinker. Flies I judged out of the question in such deep water.

Taking the centre of the river, the Indian rowed me down-stream for a quarter of a mile. I utilized the time in carefully noting the direction the fish were taking. The centre, where the water was deepest, did not seem to be their course so much as the sides, that nearest the right bank being the favourite run. The current took that direction, and there were a good many large rocks and other conditions favourable to the formation of pools where the fish rested. The water on the left bank was weedy in places, which indicated a slackness in the stream in that direction.

I trolled a short line on the way down, but fishing with the current is never very successful. The Indian,

who evidently knew nothing about angling, possessed the next best merit for my purpose-docility-and made himself a willing machine. Up-stream I let out about sixty vards of line, and exhorted my guide to row slowly. For half an hour nothing transpired. and I varied the experiment by using a longer and at times a shorter line. Passing round a rocky island there was a sudden convulsion imparted to the rod, and the reel gave a vigorous shriek. I had hooked a fish. I awaited the rush which generally follows when a salmon is hooked under such circumstances. but it never came. Like a great many fish, my introductory specimen unkindly severed his connexion at the earliest possible moment. My guide looked incredulous, and fortified his unbelief by the theory of a rock or weed.

We had not to wait very long, however, for the triumph of a nobler faith. A hundred yards higher up the river the reel again gave out signals of distress, and continued to roar after I had accepted the gage of battle and used all the resisting power of the rod. The fish made slightly down and across stream. I applied all the brake I could with my finger, but the pace was rapid, and the friction of the line nearly cut the skin. The usual wiles of the playing fish were adopted in turn by my first Harrison River captive. He rested after the run, giving me time to recover twenty or thirty yards of line, filling in the interval with vigorous head-shaking and jiggering. I directed

my guide to row towards him. The pause on the fish's part was a brief one. The slack caused by the movement of the boat stimulated his activities, and he dashed off again, not crying halt until a distance of one hundred yards was covered. The rush brought him to the surface, where he rolled over like a porpoise, showing a fine broad side and a huge tail. The water divided before him with a hiss, and a white-flaked surface marked the place where he floundered.

"After him!" I cried to the Indian. A salmon like that, if he has a mind, can empty a reel. Sharp as the line could be recovered, I wound it in. A fish that breaks the water after a long run is generally tamed for a few moments, and every angler knows how to take advantage of the pause. When next he began to move, only about a length of a dozen yards separated us. He headed up-stream, and doggedly resisted, keeping pace with the steady strokes of the oar. I had met that kind of fish before; it is the usual policy of the springer "to take it aisy just to rest himself after racent exertions." The counter policy is to make the resting stage as hard as possible; I bent the rod in pursuance of it.

"How long is this going to last?" I wondered. I had not to wait long for the answer. He was only sitting out a dance, and was at it again "like the divil," as my Irish gillie would say. Twenty minutes elapsed before there was any change in the tune. Once more he turned down-stream, as if he was

getting into strange water and hankered after more familiar haunts. I encouraged him, and the boat was brought round. Off he went, but saving his gills by taking a slant—straight down-stream is drowning for a fish. Again I called to the guide to be after him. The impassive countenance of Hiawatha leaped into life, the spirit of the chase inbred in his blood underwent a resurrection. The oars flashed. "Yah, sure!" he cried with alacrity.

I tried to get below my quarry, and so command the course, an old trick of toning down a fish given to mad rushes, but he saw through it, and slanted off despite vigorous pressure. A clear hour passed before there was any sign of capitulation. Then the runs grew shorter, and I got him nearer to the surface. I could see the fine proportions of the prize, and if he wanted a little longer time, I was not going to hurry him.

Meanwhile, a telescopic gaff in my game bag was placed in readiness. The grunt of surprise that the Indian gave as he saw the fifteen inches drawn out to five feet, I place amongst the interesting incidents of the day. At length, I got the fish to the surface, and drawing him within reach of the steel, gaffed him.

An hour and ten minutes had passed from the time he drew the first screech from the reel. A noble fish, perfectly fresh, and in magnificent condition. He scaled 25 lbs. exactly.

- "You have forty minutes yet to catch your train," was Hiawatha's comment.
 - "Are you good for the day?" I asked.
 - "Yah, sure."
 - "Then we shall spend it on the river."

We landed, and I replenished my stock of tackle and laid in luncheon for the day. The Indian suggested going higher up. There were plenty of fish everywhere, but the river widened out so much that they were scattered. I had to spend a couple of hours discovering the new lie. I did not think we improved our angling prospects by the change, but making the best of it, I watched the salmon, and discovered two or three distinct lines where they were showing. The Indian's sharp eyes were of great service in the scouting business, and the way he brought the boat on them showed considerable skill.

The Harrison above the bridge takes a broad sweep, washing the base of a pine-clad mountain, a favourite resort of bears.

Wild duck, feeding in a bed of weeds, drew out of cover at our approach, and in well-ordered file followed their leader into more remote shelter. A large saddle-backed gull was settled on a narrow sandbank abreast of the mountain. Far down the river the sunlight was streaming through a gap between the hills, and lit up a patch of water with a brilliance that made a more striking contrast with the dark background of forest pines.

Another fish soon rewarded our vigilance. A good part of the morning performance was repeated, but the item was got through more expeditiously. In forty minutes the salmon was in the boat, and scaled 24 lbs.

We did nothing more before luncheon, except to lose a spoon-bait which had proved the attraction to the two fish landed. A good many uprooted trees and sunken logs are scattered over the river, and one of them appropriated it. Another spoon, but an inch longer, replaced it. It was a huge weapon, a vulgar thing, inconsistent with the good taste of a well-bred salmon, but it was "Hobson's choice," and up it went. The rise seemed to go off between I and 3 o'clock, and I proposed returning to the lower reaches, where so much time would not be wasted in getting on the fish.

We passed two or three island rocks covered with blueberry bushes in full fruit, and had to resist the temptation to tarry and eat. "I must get the third fish," I exclaimed to Hiawatha, as he gracefully plied the oars with scarcely a splash. A loud clatter from a fir tree that overhung the bank called attention to a squirrel. He shot up a great arm and, ensconced in the fork, swished his tail over his head in an attitude of defiant security. Ah, Adjidaumo, "Tail in air, the boys shall call you," befriend us, as thou didst the great Hiawatha. We too would catch the "king of fishes"; and Adjidaumo

swished his tail again, and gave us a send-off chatter.

The sharp prow of the boat silently parted the water on either side, and clear of the wake of the skiff the great spoon revolved, its blend of silver and gold sending electric flashes through the river. It clears a shallow here, dips into a deep pool lighting a space all round it. A Dolly Varden sees it and sidles out of the way. A cohoe plucks up-courage, is about to make a snap at it, hesitates for a moment, and it goes by. But higher up-stream, in the shelter of a boulder, rests the modern Nahma, "king of fishes." His great tail sways to and fro, his head flicks from side to side in swift glances at drifting twig and fallen leaf. His old environment in the far-off sea, still and calm with the silver sand beneath him, is forgotten, and he rises to the surface once more, and breaks it in exuberance of life. A glimpse of metallic light is caught as he slowly returns. He twists half round and instinctively stiffens himself, simulating the lifelessness of a log. Nearer comes the rash invader of the king's territory, and swift as lightning there is a plunge, and his great jaws close on it like a vice in a masterful grasp. But the hidden sting of his captive smites him to the "Ah, Nahma, thou hast been rash in thine onslaught this time. Put forth thy best strength now. Masterful as thou art, thou wilt need it. that thou hast been, truly art thou bitten!"

He is across the stream, plunging and shaking his

great head in mad resentment of such unwonted infringement of his liberty. How mighty he is in battle, and the decks must be cleared to snatch from him the victory; a jam in the rings, a tangle in the reel, and he will smash like packthread the stout silk line, or snap in sunder the most powerful rod!

In response to his first plunge the reel gives. He mistakes the act of yielding for weakness, and seeks to better the odds by increased pace and fiercer battle. In the forty-mile swim from the sea there has been nothing in the pace to match that sample. He rises for a moment, so close to the boat that Hiawatha sees him, and exclaims, "Oh, if I had my spear!" Shame on thee, Hiawatha! Think of thine ancestor who wrestled fairly with the green corn until he mastered it. It is not thus we fight the Nahma of the stream. Skill against strength is the principle; a fair fight and no favour.

An hour goes by . . . another half follows, and by this time the captive had traversed up and down a mile of water. Now he lies on his broad sides, inert on the surface. The hands of the watch marked five minutes past four when he was hooked; it had reached ten minutes to six when he was gaffed. I was almost unequal to the task of lifting him over the gunwale, and sank with aching back and limp arms from the prolonged strain.

"You fish for the sport of it," said Hiawatha, in a

final comment, as if a new vision of the chase had stirred him.

Again there was a chatter in the pine tree,

"Oh, my little friend, the squirrel,
Bravely hast thou toiled to help me . . .
Boys shall call you Adjidaumo."

The fish weighed 26 lbs., a hen species, and, like the others, in the pink of condition.

These salmon are made for fighting. They are short and thick and possessed of great muscular power. If English anglers, who speak disparagingly of their powers compared with the European species, would use lighter rods and tackle than those generally employed on the Campbell and other rivers, I think they would find a sporting entity in them in no respect inferior to Scotch and Irish springers.

The capture of three fish aggregating 75 lbs. created a little sensation amongst the villagers, who assembled en masse to inspect them. Some of them looked at the apparently frail rod and fine line and shook their heads in incredulity. It seemed impossible that such tackle could hold out against such odds.

The next morning the proprietor of a large sawmill took me in his motor-launch up the rapids. The fish passed through them on their way to Harrison Lake and the Lillooet River, which constitutes their spawning ground. It is an ideal place for the fly, delightful streams and swirling eddies, where a Jock Scot or a silver doctor would soon give a tight line. It was impossible to fish it from a motor-launch, and I had only two hours to spare before catching the train which I gave up the previous morning.

The cohoes run about the time of the spring fish, and they are as ready for the fly as the European grilse. I read in the Harrison River rapids the possibility of the best salmon angling, and the application of the gentle art in its most scientific form.

CHAPTER XV

Going west—Stave River—Minnow and spoon-bait—Coquitlam River—Vancouver angling—Scarcity of gillies—Off to the Narrows—Angling in the Pacific—Playing a salmon in a swift tide—Dame Fortune's amends—Off Vancouver Island—The Campbell River—The Cowitchen River—Advocacy of the fly—The best months—Trout fishing—The fly season—The fry season—A visit to Seymour Creek—A lonely forest—Track of the grizzly—In search of a trail—The Vedder river—A charming retreat—Wading for Dolly Vardens—Capture with the fly—A magic evening scene—The North Thompson River—The Columbia River—Kootenay and Okanagan—The course of the Columbia River—Great trout lakes.

OING further west, between Mission Junction and Whomack on the Canadian Pacific Railway, there is the Stave, another salmon river. It runs from Stave Lake, five miles distant from Ruskin. The lake itself is only about three miles long, and is fed by a triplet of small rivers flowing from the north. Fraser salmon run up the Stave to spawn. It has many swift reaches, where cohoes and spring fish rest, and are in a mood to take the fly. If the river is discoloured, a medium-sized spoon or a large Devon minnow are suitable lures. The Fraser is beautifully flanked at Ruskin, with

hills well coated with thick brushwood. Lurking shadows play about their shoulders, and over their summit the snow-clad heights of the Selkirk Mountains flash and sparkle. A quail rises on the banks of the river, and flies at a pace that gives this bird, almost extinct in England, a valued place amongst American winged game. It slows off halfway across the water, but the impetus has been so great that the wings do not flap until it drops into cover on the opposite bank.

Coquitlam River is the nearest of any importance to the sea, east of Westminster. It, too, is a tributary of the Fraser, and flows from Coquitlam Lake, only a few miles' distance from the main river. Whilst it is scarcely equal to the Stave or Harrison from an angling point of view, it holds a high place amongst the sporting rivers of the province. The lure intended for the smaller game is often taken by big fish, and a valuable addition is made to the basket.

At Vancouver the salmon angler again can mount his trolling rod and enjoy good sport in the Narrows, where the Pacific sweeps in at full tide. There the peaceful harbour, sheltered by mountain and forest, affords anchorage to the great ocean steamers which sail to the Orient.

The novelty of rod-fishing for salmon in the open Pacific was so unique that I embarked on the expedition with keen interest.

The difficulty in Vancouver is to find a boatman



A FISHING FLEET, VANCOUVER HARBOUR

to whom the destiny of the angler and the fishing can be safely entrusted. It speaks well for the prosperity of the city that there is practically none of the sporting leisure classes, such as one finds in dumping quantity in Ireland and Scotland. There the shoemaker's last and the crofter's hoe are willingly set aside for a day with rod or gun. In Vancouver it is otherwise. One might spend a week in quest of an efficient attendant, and fail to discover him. The makeshift is a person to be studiously avoided. desperation I picked up one, who undertook to row me to the fishing ground, and to my horror I found he was not acquainted with the elementary principles of rowing. The tide had carried us out for about a mile without particular effort. When it came to facing a cross-current his incompetence was so marked that I had to take the oars myself and row to North Vancouver, where I dismissed him and procured an Indian substitute.

I was fortunate, however, on another occasion to find an Irishman who was taking a day's holiday, and to whose qualifications as an excellent boatman was added the ardour of an enthusiastic angler. In his hands I was perfectly safe, and I cherish the most pleasant recollections of his skilful services.

On the first ebb of the tide, we put off, skirting the shores of Vancouver Park, a piece of virgin forest where the finest specimens of Douglas pines are still preserved. The Narrows derive the name from the closing in of the mountains on either side of the sea, leaving only a space of about half a mile for traffic. A lighthouse is placed on the extreme land point on one side, and the remains of a forest, intervening between the sea and distant mountains, are on the other. The pent-up ocean flows in and out at an enormous pace through the cutting. Three creeks join the sea at the Narrows; the furthest west is Capilano, the next Lynn, and the third Seymour.

The cohoe salmon run up these creeks and hang about at the mouths during the summer-time awaiting a spate.

Large spring fish are found amongst them, but not in any number. The condition of the tide determines the angling ground. With a spring ebb, the salmon come far in and are caught between the lighthouse and Capilano Creek. As the tide passes to the neap stage, one must go further out, and seek them off Whitecliffe Point and the mouth of the Squamish River.

There is no difficulty, however, in discovering their whereabouts. Cohoe are as lively as grilse, and rise to the surface as freely. The first day I found them off Capilano creek in shoals; a dozen at a time they sprang out of the water. Unfortunately it was too deep to fish for them with a fly, although up the creeks they take it freely. A spate is needed to put these mountain torrents in condition, and during my stay they were almost dry. There was nothing for it but

to mount a spoon-bait. Cohoes which do not average more than 7 lbs. prefer a small lure. Some anglers embellish it with a red tassel à la pike mode, but I confined myself to an unadorned pattern. The tide was at full ebb when we began to troll. There was no need to be told which were the best places; the salmon themselves soon indicated their whereabouts. Direct against the current or across it yielded the best results. The fish feel the force of the outgoing tide to a degree that makes them eschew its full strength, and confine themselves to the edge on either side.

My first fish took the spoon just on the margin, and fought as hard as any grilse that I have caught. and my experience covers hundreds. He first kept to the slack water, where he gave a couple of short runs and tried to divest himself of the spoon by jiggering. This policy proved to be unavailing, and he dashed off, and either by accident or malice prepense got in the midst of the current. The tide was running like a mill race—a mile a minute it looked and fifty yards of line were stripped off the reel before the fish stopped. It is an old dodge of a salmon to get into a swift current and stick there. swaying his broad tail from side to side. The worst part of the business was the enormous quantity of driftwood that the outflowing tide was carrying. I was in constant terror of getting my line foul, a hundred vards of which were out at the time. At one moment a huge log, fifteen to twenty feet long and thick in proportion, swept right across the line. I held my breath and set my teeth in expectation of calamity, but, marvellous to relate, it rolled over it without a touch. It was time, however, to shift my quarry, and tightening up the line and throwing the rod well back, I treated him to the Irish discipline of "giving the butt." Gradually he came, and once on the move I followed up the advantage until I had him in slack water. But the dragging cost me the fish. He came close to the boat, near enough for us to admire his broad sides and tail, when he quietly slipped off within a few feet of the gaff.

Dame Fortune made amends by giving me a brace, $6\frac{1}{2}$ lbs. and $4\frac{1}{2}$ lbs., within the short time at our disposal, beside which I hooked and lost a couple more. It is a common experience to lose a large proportion of salmon on the spoon-bait, particularly grilse, which cohoes resemble not only in appearance, but in the softness of their mouths.

Off Vancouver Island this kind of fishing can also be indulged. The open sea near the coast, at the mouth of rivers and creeks, is prolific of salmon life, and fine creels can be made. On the island some of the best known salmon angling is to be obtained. The Campbell is the chief river, which yields record fish annually. It rises in Buttles Lake, flows through upper Campbell Lake, thence to Campbell Lake proper, and joins the sea above Willow Point, opposite Cape

Mudge, covering a distance of about forty-five miles. The mouth of the river is the best place for fishing. Some angler has yet to establish the possibility of alluring these big fish with a fly. It is a misfortune that they are got so readily with a trolling rod. Few anglers go to the trouble of applying more scientific methods to their capture. The art of trolling requires no technical knowledge, whilst the fly does; and only a small proportion of those who visit the Campbell River are proficient in its use.

Next to the Campbell is the Cowitchen, which is easily reached from Victoria. It rises in Cowitchen Lake, and flows through Duncan, falling into Cowitchen Harbour about ten miles from its source. In its physical features it differs from the Campbell, being swift and with abundant rapids suited to the fly. The lake itself is good at the outlet, where a great many fish gather.

July and August are the best months for spring salmon on Vancouver Island. During September the Campbell River ceases to yield heavy fish. The cohoes run freely during that month, and can be caught in the Pacific and the creeks which intersect the island along the coast.

It may be said of salmon-angling generally, that its success is dependent upon the time the fish run from the sea. It is then that they take a bait or rise to the fly. Their sporting propensity wears off during their stay in the river. I know, from long

experience of Irish salmon fishing, that a pool may be well stocked and not one out of a score will look at the angler's lure, the exception being the fresh arrival from the sea. It is of the first importance, therefore, to obtain accurate particulars in regard to the time the fish run. The omnibus information, that salmon angling is good from July to November, is too general to be of value. What we know is that the time varies on different rivers—some are early, others late. This goes on from year to year without much change. The danger is that one may travel hundreds of miles to a river and, on reaching it, be as badly off as the man a hundred miles from anywhere with the wrong cartridges.

Trout, on the other hand, are permanent residents. and the angling season is more indefinite. Here again a knowledge of their habits is valuable. When the fly is on the water, is always the best time for angling. This rule is of universal application. There is a set-off in many parts of the Dominion against cultivating the acquaintance of the streams during that period. It is the time when the pestilential black fly bites a piece out of the angler's flesh, sucks his blood, and then flies off with the piece! Waiving that point, May and June are the best months. In July and August the fry appear in the rivers and lakes in myriads, and receive the trout's undivided attention. This is the case at home, and I found it exactly the same in the



FISHING A VICTORIA CREEK



Dominion. When the fry appear the fly is at a discount, minnows and spoons doing most of the execution. These spinning lures imitate the habits of live bait, being bright and wriggling, which trout and bass seize with avidity.

As far as my observation went, there is very little fly on the rivers and lakes in September.

There is a further circumstance that is demoralizing to trout in Canadian waters. When the salmon run up the rivers to spawn the trout follow them, intent on devouring their ova, which are deposited on the gravel beds. So absorbed are trout in this pursuit that they rarely look at any other food. They are then freely caught with salmon roe, a poaching method of angling that is most reprehensible. I fear it is widely practised in the Dominion.

All the salmon rivers I have mentioned hold trout. There are many others scattered all over the province. The Cowitchen in Vancouver Island is excellent, and very fine specimens are taken in it. With a canoe, using a light rod and medium-sized flies, good sport may be enjoyed. The creeks all round the coast may be reckoned upon. During the flitting of the natural Ephemeridæ the best baskets are made. On the mainland, near the city of Vancouver, the creeks already referred to are favourite resorts for the angling community.

The water was so very low during my stay in

that district that I was able to see the fish in the deep pools.

Seymour Creek is a swift river that flows through a cutting in the forest, and may be described as a type of the streams that trout frequent. It is very deep, and in some parts is so closed in that it can be heard but not seen. From high banks its line can be traced for miles through the forest, a black shadow by contrast with the green foliage and lichened rocks. Other reaches are streaks of light. where the rapid water breaks into sparkling crystals over log and boulder. The victims of the great forest fire which, years ago, swept the district with disastrous effect, still stand in charred magnificence. Black and dismantled Douglas pines rise hundreds of feet, towering far above the living trees which, by comparison, are insignificant. The solitude of the place was typified by a lonely crow that rose and flitted before me, always choosing the stump of a dead fir as its perch, as if its blackness and detachment were in keeping with its mood. I followed a corduroy wagon road for some miles in quest of the trail which led to the river. I could tell whether it was leading to or from the creek by the crescendo or diminuendo of its roar.

One human being only crossed my path in the forest; he was armed and in quest of bears. He showed me where one had been shot a few days before. "Black bear?" I asked. "No, a grizzly." Of the trail

I was searching for, he knew no more than myself. I tried to force a way to the river by means of a steep declivity, but, after scrambling down a hundred feet, I came upon a ledge of rock and, on looking over, found myself on the summit of a precipice which might have served for an eagle's eyrie. I beat a cautious retreat. It was the kind of place one not in search of a grizzly might find him, and, being practically a cul de sac, might lead to unpleasant consequences. Bears are not given to attacking except as the easiest way of making their escape. Having nothing in the shape of a weapon more formidable than a salmon gaff, I declined the risks.

One thing soon learned in the forest and mountains is, that without a guide it is inadvisable to leave the beaten track. At length I discovered the trail, which proved a most difficult one. way was blocked by fallen trees, abrupt descents, and other impedimenta inimical to flesh and clothing. I was compelled at one point to scramble over a charred log, which blackened my nether garments beyond the point of defensible respectability. The day had been exceedingly hot, and the mutterings of a thunderstorm could be heard in the distance. When I got to the river I found it very low, like Capilano and Lynn. The force of the current during spate could be deciphered in the stones in the river's bed. They were as smooth and polished as pebbles on the seashore.

The only time to get fish during low water was at dusk or break of day. I met an angler on leaving Vancouver that had fished the creek that morning. He had taken half a dozen good fish which looked to be from 1½ lb. to 4 lbs. weight. They were all caught before sunrise. Similar results might be achieved after sunset, so I was informed, but I had no mind for facing the forest in the dark, as in Canada there is only a brief period of twilight.

Pursuing the journey inland, there are many good trout rivers. The Coquitlam and Stave, already mentioned as tributaries of the Fraser, fish well before the salmon begin to run, and trout abandon themselves to the quest of spawn. Another place that repays a visit is Lillooet River, flowing from Lillooet Lake, and only a short journey from Stave. It amply rewards the aspirations of the fly fisher.

Vedder River is about six miles from Chiliwack, on the south side of the Fraser. It is interesting not only from an angling, but from a scenic point of view. It is exceedingly beautiful, and one of the most delightful retreats. There is a hotel built on the river, and a new and more commodious establishment is in prospect. The old one lost a considerable portion of its frontage through floods, that are at times terrific. The river is a sharp descent from Chiliwack Lake, only a few miles distant, and rises and falls rapidly. A couple of winters ago, the wooden bridge that spanned it, and the tennis court



A MOUNTAIN CAÑON, WHERE TROUT ABOUND



fronting the hotel, were washed away. The bridge has been replaced by an iron structure, and a more elevated spot has been selected for the hotel. It is a convenient centre for angling trips. The trout run to a large size; four to six pounders are not uncommon. They are taken with small spoons or minnows. Dolly Vardens are plentiful in the Vedder, which can be caught with the fly up to I lb. or I½ lb., and on a light rod and tackle they give lively play.

It was my good fortune to meet at Chiliwack a young architect from Vancouver who had graduated in the English School of Angling. Both he and his wife were enthusiasts. The latter, donning high rubber boots, defied the numerous fords, whilst her husband and myself, equipped with waders, fished the deeper pools. The river is intersected with tributaries, and the main stream separates and unites many times in its precipitous course, Shallow noisy reaches, followed by pools with a silence befitting their depth, and a cataract here and there, are the conspicuous phases of the river. Where a March brown or a Wickam fancy tripped over the gravelly shallow, the flash of a Dolly Varden would appear, its blood-red and orange spots glinting in the sunlight. Then the rod would quiver, and the chase down-stream begin. The Vedder possesses all the exciting elements of sport-swift rapids, swirling eddies, dangerous snags. A branch trailing in the stream would invite sanctuary to the lively captive; how to steer him clear and keep

one's balance was a problem painful enough at the moment, but how delightful in retrospect!

Deep pools where we knew the bigger fish lay were approached in a different fashion. There was abundance of fry and minnows in the creeks. These we captured with a dry fly, and mounted them on a Thames flight, the only method of outwitting the wary game. My companion earlier in the week broke his cast in a fish that must have been 6 lbs. trout could be seen the next day, springing out of the water, with the gut hanging from him, apparently indifferent to this unusual appendage. the creek the forest trees, interlacing in thick impenetrable foliage, cast a cool shade over the river, a vista of a magnificent range of mountains amongst the glaciers, where the river rises, showing beyond. peaks stood clear-cut above the pine-clad woods, and in the evening light, there stole that wonderful violet atmosphere that sheds such a mysterious halo over God's everlasting hills.

Of larger rivers there are many, where the different species of trout are found. The North Thompson, which joins the Fraser at Lytton, flows through Kamloops Lake. Rising in the Quesnel region, and drawing its life from the union of a small triplet of lakes, of which Albreda is chief, it winds in a southern course, receiving the contents of other streams at various points. Its water is clear, and most of the trout species make it their habitat.

The Columbia River also flows through the Quesnel northern district, south of Canoe River, traversing hundreds of miles. Its course lies through Golden, Windermere, East Kootenay and Nelson, an interminable stretch of water.

Kootenay and Okanagan Rivers offer further angling facilities, as well as the Skeena and Eagle.

The Great Lake trout can be caught trolling, and battle royals can be had with fifteen and twenty pounders in the Shuswap, Kootenay and Kamloops lakes. There the formidable steel-head trout of the Salmonidæ order is discovered, as well as the larger specimens of the Salmo kamloops, or Dolly Varden. These fish, like our European Salmo fario, affect cannibal habits on reaching the years of discretion and scorn the fly.

CHAPTER XVI

Salmon and trout supply—The falling off—Government Fisheries Commission report—Proposed remedies—Minority report—The United States difficulty—Mr. Babcock's comments—Opinions of Steveston fishermen—Deadly salmon traps in Puget Sound—The lesson of British Isles fisheries—Creation of hatcheries—Future guardianship of fisheries—Mr. Wilmot's report—Mr. Kelly Evans on revenue from fisheries—Wholesale destruction of whitefish—Depleted lakes—Suggested remedies—Angling as a recreation—Playing the game.

It is beyond question that salmon and trout resources in British Columbia are enormous. How far they are likely to continue is a question which has passed out of the academic stage and has become both practical and acute in the interests of sport. In Canada, as in Great Britain and Ireland, there are signs that the supply of fish is falling off. The enormous takes of the earlier days are no longer repeated in the Dominion. Lean years, the inevitable symptom of diminishing supply, are experienced at rapidly recurring intervals.

A Government Fisheries Commission has been appointed to investigate the subject, and it is evident from its reports that Canada, like Great Britain, has been killing the goose with the golden egg. The

depletion in the Fraser River supply of salmon is shown in the following official figures: The catch of 1903 was 62 per cent. less than in 1899; 1904 was 66 per cent. less than 1900; 1905 22 per cent. less than 1902; 1907 38 per cent. less than 1903.

To remedy this state of things, recommendations were made with regard to netting and trapping, which included a weekly close season at the mouth of the Fraser River during "big" years—these generally occur once in four, when the run of fish is much above the average—a thirty-six hours' close season in "poor" years. Outside the mouth of the river a thirty-six hours' close season was proposed for all years.

A minority of the Commission made more drastic recommendations, including a close season from July 1st to September 15th, and the application of the thirty-six hours' close season to the whole of the river, and not limiting it to the mouth. Restrictions in regard to the length and depth of nets were advocated, and the absolute closing of the river from August 25th to September 25th.

The United States fishermen and canners, who have rights in Puget Sound, had to be consulted in regard to the proposed changes. An Act of Parliament, acceptable to both parties, gave promise of a fair settlement. But it only proved to be an Act on paper. The fishermen on Puget Sound ignored it, deeming it more profitable to pay the

fine imposed by the Act than desist from the netting.

In his 1903 report, Mr. Babcock comments on the situation as follows: "I believe that the decrease in the run and the absence of fish upon the spawning grounds this year is attributable to excess of fishing. An investigation of the conditions existing on the fishing grounds for the past five years amply demonstrates that to be the cause, and the empty spawning beds of the Fraser this year, and last, prove it."

I visited Steveston, where the great salmon canning factories are established on the banks of the Fraser. They are manned almost exclusively by Chinese and Japanese. The netting is allocated to the Japs, who are the best boatmen. There the opinion strongly prevailed that the falling off in the fishing was due to excessive netting. On the United States side a system of deadly traps prevails, which the first year caught literally millions of salmon. Now only one year in four is good. Owing to the scarcity of labour, the waste-was something enormous. The canners just retained the quantity of fish they could handle in a day, and threw the rest of the haul in a dead or dying state into the river, or left them to rot on the banks.

One of the advantages of the use of traps over drag-nets is that fish are kept alive. On the other hand, the facilities they afford for capture are far



greater and more seriously affect the question of supply. The unwillingness of the States to join hands with the Canadians has led to further serious consequences. Chafing at the greater privileges of their neighbours, the Canadian canners petitioned the Dominion Government to grant the use of salmon traps on Juan de Fuca Strait, so as to place them on an equality with the fishermen of Puget Sound. The Provincial Government backed the appeal, and it was granted.

Mr. Babcock justifies the concession in his 1903 report on the ground of fairness to Canada. He frankly admits that the question is not whether trap-fishing is or is not a destructive method, but whether the United States should have a monopoly of it. He shows that during the previous season the United States issued 305 trap, 84 purse-net, and 92 drag-net licences for salmon, whilst the Dominion fishermen were limited to gill-nets. contends that the fish trapped by the United States fishermen passed through Canadian territory first. and that they should be bagged before they reach Puget Sound. He leaves out of account that the Canadian traps will in all likelihood capture quantities of fish which do not pass into their rivals' water, and therefore the work of destruction will be increased rather than diverted. The raison d'être of the recommendation is admitted in Mr. Babcock's closing words"I am not, however, at this time prepared to advocate the use of traps in any of the waters of the Province that are unaffected by the use of American traps."

In 1908 an International Fisheries Commission was created under a treaty between the Governments of Canada and the United States, but it possessed no independent powers that could not be set aside by Congress, as "an unwarrantable interference... regarding a matter in which the State legislation is supreme."

A report of last year (1910) sums up the situation in these words: "It is evident the only remedy for conditions existing in Puget Sound threatening the destruction of the salmon industry is voluntary compliance with the existing law on the part of those engaged in the business, and a universal and earnest determination to protect and perpetuate a great industry."

Those who know the history of the salmon fisheries in the British Isles will appreciate the danger that this unhappy difference creates. Scotch and Irish industries have been ruined through overnetting. Companies which paid liberal dividends to their shareholders, complain that they do not pay their working expenses now. It would be worth while for the Governments of Canada and the United States to send over representatives to the Old Country to collect evidence on these points. I believe the

lesson to be learned would hasten the settlement of their differences. The Pacific, no more than the Atlantic, liberal as its gifts are, can hold out against the commercial drain imposed upon it. If it be correct, as specialists contend, that all the species of Pacific salmon die after spawning, the work of destruction will progress at a more alarming rate than in Europe where the fish survive spawning. There are settlements which come too late. The moral of the divided authorities on the malady of the feline species is a propos:

"But long before they could decide
What should be done, the cat had died,"

The future of trout and bass fishing is another subject which interested me during my Canadian trip. The fact that hatcheries are being established throughout the Dominion is symptomatic of decline. There is no other reason for the expedient. Assuming that by such means the stock can be kept up to the demands made upon it, which is a big assumption, the quality is certain to be inferior both as a comestible and a sporting entity. I have fished preserves holding naturally and artificially bred trout, and the moment the rod bent in a captive, I could tell to which category it belonged. There is as much difference between these fish as between pheasants reared under a hen and those hatched in the wild woods.

The need of replenishing by artificial means is unquestionable. To assume, however, that the destruction of the natural supply does not matter so long as the deficiency is made up in that way is an argument, I am disposed to think, too readily accepted in the Dominion. What struck me was the obtuseness of the age towards the future. "As long as I have a good time, catch plenty of fish, and throw away the surplus, why should I put myself out for the sake of the man who comes after me?" That appears to me to be the trend of things, and such a liberal interpretation of free agency should be firmly dealt with by the Government. If the guardians of the future are unable to inculcate the altruistic doctrine that I am my brother's keeper, they should at least insist that I shall not be my brother's robber. The apology for this little homily will be found in the official reports on the fishing, and the causes that have led to wanton destruction in the fish supply. The efforts to make the waste good reflect a great deal of credit on the authorities, but its inadequacy is equally apparent. In the province of Ontario alone, from 1901 to 1909, there were 59,842 fish reared and deposited in the rivers and lakes. These were nearly all bass-brook trout only amounted to 55, and speckled trout fry 2000. Taking the eight years, the average stocking amounted to 7480 per annum. An examination of the reports shows that this is far below the drain put on the rivers and lakes. J. H. Willmot, of

Beaumaris, states that "throughout our northern districts there are many American fishing clubs, some of these holding land, and having very fine club houses erected thereon. As a rule the members spend most of their time fishing, and needless to say many thousands of our fish are annually caught by these men, who after taking out their licences are only acting inside their rights." As an example he says, "We will suppose that a club has a membership of thirty men, (which is a low estimate, as some have over a hundred). We will say that twenty out of those thirty go out and catch their legal number; these amount to one hundred and sixty a day, or 4160 in a month of twenty-six working days. Looking at this matter in the above light, it is apparent that many thousands of fish are annually taken by club men."

This report only deals with a district in Northern Ontario and for one month of the season. The subject is further discussed by Mr. Kelly Evans, Commissioner of the Ontario Government Game Fisheries. He alludes to the non-resident anglers' tax imposed three years ago. Four thousand pounds was received in 1909 from 10,000 visitors, who came to Canada for angling purposes during that year. It would be difficult to see how any stocking could keep pace with such exhaustion, particularly when Canadians themselves are added to the list.

Mr. Evans's allusion to the waste that takes place

in netting practices is most important and throws a searching light on the question.

"Just as those who first exploited the forest wealth of this country took the most valuable species of wood, the pine, so those exploiting the fisheries of Ontario took the most valuable of our fish, the whitefish. Let us consider the position with regard to this: the total catch of white-fish in 1873 was nearly five million pounds, and to-day it is less than two and a half million pounds. The decrease appears to be in round figures about 2.350,000 lbs., but remember that the engines of capture have been greatly improved since that time, and many more men are engaged in the work. In valuing this food diminution at its present price, it would show that in the value of whitefish alone, a decrease has taken place to the extent of quite £50,000 a year, which capitalized at 5 per cent, would show that the capital value of the whitefish alone had decreased between 1873 and 1907 by £1,000,000. There has been really no necessity for this alarming decrease having taken place. In 1892 a Government Commission. after taking testimony throughout the provinces. reported to the Dominion Government some alarming facts. Old fishermen who gave their evidence in 1882 spoke of the good old times when they took as many as 90,000 whitefish at a haul, with a net at Wellington Beach, and said that instead of endeavouring to use sewage for fertilizers . . . they acted upon

the principle of using this valuable human food as manure upon the farm. The quantity of whitefish and other fish then in Lake Ontario we have no record of, but that it was immense there can be no gainsaying."

The "immense" quantity of fish in Lake Ontario is now almost exhausted. I did not fish it, as I was informed that it was practically worthless. Going further afield to Huntsville, there is evidence that decline has taken place there in both bass and trout. The lakes near Huntsville are played out, and to obtain good sport one must go to less frequented water beyond Dorset. To find a remedy for the depletion is a necessity. It is quite evident that the Government are aware of the facts. Mr. Evans, their commissioner, has not failed to report to them that Canada "is face to face with absolute depletion."

How could it be otherwise, when we are informed that the Great Lakes are swept by the aid of steam trawlers with nets five miles long?

From the angling point of view, the remedy must be sought in greater conservancy, a longer close season and the restriction of angling to more scientific methods. It must sooner or later come to that. Where trout can be taken with the fly, no other lure should be permitted. There are plenty of lakes where trolling and and bait fishing may be pursued. All hand lines should be tabooed by legitimate anglers. It is not only a pot-boiling method, but it is destructive of sport, as far more fish are hooked than landed. At Vancouver, out of half a dozen boats, I was the only angler that used a rod. I saw plenty of fish hooked, but few gaffed. When the object is food, it is another matter, but there was no trace of indigence amongst those whom I saw using hand lines freely.

The number of fish per diem to a rod, and the size to be basketed, are further matters well within the province of legislation.

I did not visit new Brunswick, where the salmon angling is said to be excellent. Nearly all of it is in private hands and strictly reserved. It can scarcely, therefore, be so interesting to the general public.

I have been deeply impressed with the magnificent possibilities of the open water in many parts of Canada. For all-round sport, I do not think it can be excelled anywhere. By strict rules of conservation, liberal re-stocking, and insistence upon playing the game, a sporting field is open for all time to the sons and daughters of the Dominion. The strain of commercial enterprise, now at high speed, and likely, from what one sees, to continue, makes recreation of one kind or another an absolute necessity. The opportunity of enjoying it ranks amongst a people's most valuable national assets. It is incumbent upon those entrusted with the people's rights to nurse and safeguard it. To plunder the gold or silver mines would be ranked as a penal offence, to plunder the lakes

and rivers is, I venture to think, a greater crime. The mines are only a department in the wide range of industries, and will be played out sooner or later, but the great waterways occupy a unique position, and their resources, once destroyed, can never be replaced. The depleted rivers of the adjoining States, I think, clearly teach that lesson. Knowledge of the art of angling is not beyond the capacity of any youth or maiden of average intelligence. Let them acquire it. Rules that make it compulsory in the case of the young aspirant will bring higher rewards in the end, in the mastery of a fresh accomplishment. By the practice of the art the over-wrought mind will gain zest, and life's task will be faced with new hope and inspiration. This section of the playground of the northwestern continent, to fulfil its purpose, naturally must be placed on the same footing with lacrosse, baseball, cricket and golf, with rules of honour equally binding. the observance of which must be safeguarded by all right-minded inhabitants and visitors.

CHAPTER XVII

Wild fowl—Duck and their habitat—French River—Temagami — Outskirts of Algonquin Park — Manitoba, Saskatchewan and Alberta provinces—Wood duck, pintail, canvas-back, etc.—Game — The Canadian rough grouse — The sooty, Oregon and grey-ruffed species—Ptarmigan classification—Prairie chicken—Black-game and capercailzie—Pheasants, partridges, quail—Game characteristics—High mountain and wood species—The sporting quail.

Duck include all the known species. The swamps and lakes adjoining the great railway arteries bear witness to the abundant supply. The shooting season was just opening on my return, and at several of the stations passengers could be seen with dogs and guns laden with the spoil. In Ontario the lakes throughout the province hold a large number of summer duck, and when the hard weather sets in in the north, the migratory birds travel further south, and Erie, Huron, and the rivers and streams in every direction slightly removed from human haunts, are abundantly stocked. The wild rice marshes on Lake Erie islands are a favourite

resort of the wood duck, red-head, teal, pintail and mallard.

On the French River we found the wood duck, and all through Temagami district.

Algonquin Park being a reserve, it serves the purpose of replenishing the stock on the outskirts, where shooting is permissible.

Through the province of Manitoba, Saskatchewan and Alberta, the lakes and marshes teem with flocks of wild duck. Travelling on the Canadian Northern Railway, between Edmonton and Winnipeg, I saw some of them drop to the sportman's gun.

Where the prairies begin to pass into the foothills and detached lakes, and sinuous rivers intersect the plain, wildfowl were almost the only living creatures to be seen. They were dotted over the water, and from thence to Vancouver they are to be found almost everywhere on the lakes and rivers between the hills.

Of the duck throughout the Dominion, the following species may be enumerated.

The wood duck, Aix spona, which derives its name from its habit of building its nest in the hollow of trees. I came across it on Lake Erie, and the Vedder River at Chiliwack.

The pintail, Dafila acuta, is one of the most interesting and graceful of wild fowl from the natural history point of view. It has a long slender tail, ending in a sharp point, and a thin neck, full of

restless activity. It is one of the fowls that are as graceful out of the water as in it. The reeds and brushwood around the lakes and ponds are its favourite cover.

The canvas-back, Aythya vallisneria, one of the most delicate fowl for the table, frequents the coast. It is plentiful on the Okanagan Lake and throughout the Cariboo district, where it nests, and also in most of the inland provinces.

The red-head potshard, Aythya americana, is not found in great abundance, except on the coast. It also nests on the Cariboo Lakes.

The mallard, Anas boschas, is a distinct species, and must not be mistaken for the male bird only, as the European term implies. It is the most common of all species and the progenitor of the domesticated duck. It is widely distributed and the most difficult to shoot owing to its wariness.

There are also all the varieties of widgeon, *Mereca*, and teal, *Nettion*. The latter run into three colours, green, blue, and cinnamon.

Snipe are generally found in or near the habitat of wild duck, and in many cases big bags are made of these wild fliers and delicate table dainties.

Passing from wild fowl to more distinguished game, Canada has several varieties of grouse, ptarmigan, capercailzies, black-game, pheasants, partridges and quails. The dry belts of the country form their haunts. There are several species of

grouse. The Richardson, *Dendragapus obscurus* richardsonii, is a mountain bird, found on the east of the Cascade Mountains and through the Rockies. The stock is abundant.

The Canadian rough grouse, Bonasa umbellus togata. It is akin in habits to the Richardson, and occupies similar regions, but found as low down as Chiliwack, and along the woods of the Harrison River, where I found it during my fishing expedition. The sooty grouse, Dendragapus obscurus fuliginosus, makes its home among the islands along the coast. It is found on Vancouver and the Queen Charlotte Islands, all along the shore and the region generally west of the Cascade Mountains.

The Oregon rough grouse, Bonasa umbellus subini, is similar in habits to the sooty grouse, and frequents the same localities. The grey-ruffed grouse, Bo-nasa umbellus umbelloides, also inhabits the Rocky Mountain districts, Beaver Pass and Okanagan, on the mountain ledges.

Ptarmigan are classified amongst grouse, and are only made a distinct species on account of their white plumage. There are three classes. The willow ptarmigan, Lagopus lagopus, the rock ptarmigan, Lagopus rupestris, and the white-tailed ptarmigan, Lagopus leucurus. The latter is differentiated by retaining its white tail at all seasons. All these species have a summer dress of varying tints, ochre and tawny, finely undulated, the wings

and underpart retaining their whiteness. Ptarmigan are confined to mountain districts. The singular change in plumage takes place during the winter, and as they frequent the highest latitudes, nature bestows upon them her protecting care and clothes them with a coat as white as the snow itself, by which they escape the keen eye of the eagle and the kestrel, as they feed among the Alpine plants and herbs.

Prairie chicken, Pediacetes phasianellus columbianus, is the popular title for the Columbian sharptailed grouse. It has changed its habitat of recent years from the southern portion of the province east of the Cascade Mountains, but is common in the Vernon locality. There is also a sage grouse, Centrocercus urophasianus; it is found at the Osoyoos Lake.

The black-game and capercailzie are importations from Denmark, and were placed in various parts of British Columbia. The latest report says that they are thriving in their new surroundings, and it is anticipated that they will make an important addition to the game birds.

Pheasants have not multiplied sufficiently to become a general sporting entity. They are to a large extent private property in British Columbia and throughout the Dominion generally. European partridges have also been introduced, and are doing well in some places. I saw several coveys near

Steveston. They were strong on the wing, as if fully acclimatized. Vancouver Island has also been stocked with these birds, and they thrive round Victoria. Two other species have been imported; the mountain partridge, Oreortyx pictus, and the Californian partridge, Lophortyx californicus, both of which have been introduced from California. Californian quail have also been imported from their native states, and have multiplied rapidly. The Bob White species is still in the experimental stage. They have not thriven as well as might have been expected on the mainland.

The game birds of the Dominion have not been sufficiently shot over to afford anything like the sport enjoyed in the Old Country. In brushwood they are not disposed to flush, even with dogs, and on the wing their flight is often no farther than the nearest tree, on which they perch. This may suit a certain class of sportsmen, but it is scarcely satisfactory to those who do not shoot for the mere purpose of killing something. When the winter frosts strip the woodland of its foliage, and the willow grouse have been disturbed, they are more disposed to use their wings, and with a breeze of wind behind them the sport afforded is very different.

The species that frequent the high mountain ranges and sweep down the hill when flushed, have earned a better reputation amongst the true Nimrods. The pace put on by the birds in such places demands skill and quickness of the first order.

Many years ago I shot pheasants just over the border in New York State in a fairly open wood where they throve in a wild condition. They flushed well and flew rapidly. One cannot say so much for those artificially reared, which are not sufficiently removed from the farmyard environment to be interesting.

The most gamey of all the birds in the Dominion are the quail. They lie like stones and with a good dog get up one by one, going away with great velocity. They require a steady hand, a clear eye, and a few thousand rounds of shooting experience to stop them. With a hard frost that has beaten down the cover, a dry air, and sunshine with most of the heat wrung out of it, a day's tramp after these swift birds in delightful and exhilarating.

CHAPTER XVIII

Big game—Guides—Natural history—Wapiti—When Greek meets Greek-Defence of young-The mule deer-Plentiful west of Rockies-The old doe leader-Destruction of species -The Virginian deer-Its keen sight-Giving the alarm-Simulation of the young-The moose-Feeding on mountain ranges-Antlers' growth-Calling the moose-Its mettle-Yarding-Dispersion-The Caribou-Speed and swimming powers-Telegraphic communications and pungency-Dispersion-The black bear-Habits-Mating season-Insect food -The Captain's midnight encounter-Stealing the beans-The grizzly bear-Widely distributed-Hibernation-Rolling like a ball—Trapping—Charged with manslaughter—The Buffalo— The penned monarch-Causes of extermination-Illegal and legalized trade—The big-horn sheep—The sentinel—Falling on its horns-The mountain goat-Dispersion-The value of the fleece-Wariness and aloofness-Guides outfit-Big game excursions.

THE big game in the Dominion are widely distributed and found in great variety. Reliable guides are to be procured in all the provinces who provide the necessary equipment for an expedition to the haunts of moose and deer, black bear and grizzly. The ambition of many travellers is not unnaturally to add the antlers of moose and wapiti to their sporting collection, and to

exhibit with pardonable pride the hide of a grizzly bear that has fallen victim to their prowess. Others, inspired with a different motive, find in the great mammalia of mountain and forest a fascinating subject of natural history, and penetrate the deep recesses of the woods or scale the rocky ranges where height calls unto height, for the mere delight of coming into touch with the wonderful varieties of animal life. Personally I prefer to study the living history of these magnificent creatures, and find it a more interesting spectacle to watch the graceful curve of a black-tailed buck, and mark the toss of his branching antlers, than to measure its carcase or count its points in death. Wherever I had the opportunity I got away from the familiar trail, climbed the rugged rocks over which the golden eagle soared and the sure-footed mountain goat leaped from crag to crag.

Whatever be the ambition that prompts one to pursue the big game, it is necessary to penetrate the wilds of the great continent to come in contact with them. With the ever-widening boundaries of advancing civilization, they have retreated to the remote fastnesses of the mountains and into the impenetrable wilds. There are abundant facilities by the great railway systems to pursue them north and west, and with camp and canoe they may be followed to their far-distant haunts. In the wilds of Temagami, the unexplored region of rivers and lakes along the Hudson Bay Coast or the vast territories of Cassiar,

Cariboo, Okanagan and Vancouver, they are to be found.

In the autumn the wapiti or elk, Cervus Canadensis, in the first flush of realized adult age, rings out its bugle challenge on the border of the forest. The Cree Indian called it the wa-was-ka-sioo. The muskoos was the name by which it was known to the Salteaux tribes. The coat of the bull probably determined its name. Wapiti means white deer, and its bleached colour suggests the title. In December it sheds its antlers, which break off close to the skull. On the young bull they grow with great rapidity. The grey tints of the body grow darker along the spine, and a brown tinge spreads from the head down the neck and legs. The breast and underpart are red, and black stripes set off the hams. A splash of white extends down each side of the tail, and the animal is white between the legs. The bull has the marks and pose of strength and grace in the fineshaped head and the well-set body. The growing antlers on which his masterful prowess depends, frequently to his own undoing, are rubbed against the trees, as if they were a source of great irritation during their unset condition. The bushes near its haunt are often stained with blood. The fuller growth goes on from year to year, the points of the antlers marking definite stages until the fourth and fifth year is reached, when they cease to grow with regularity.

Below the spot where the bull has repeated his challenge, the cows are moving among grassy plateaux in apparent indifference to the impending issue of which they are the innocent cause.

In the summer the cows calve, making their offspring objects of most solicitous care. They hide them in the thick grass, where their dappled coats might be easily mistaken for the light and shade that play amongst the herbage. Danger near, they lie still as death, the mother never far off and at the first cry for help ready to defend them with her life.

Sometimes nothing but the echo answers the challenger, at others his rival responds and emerges from some part of the hillside hard by to give battle and silence for ever the upstart. If it happens to be an older and bigger bull, the task is not difficult, and at the first onset the challenger, deeming discretion the better part of valour, retreats. If he has time he attempts to drive the cows before him, rudely butting them with his horns. When it comes to Greek meeting Greek, the conflict is often quickly decided, and the vanquisher takes charge of the herd. It is not an uncommon occurrence for the antlers of the combatants to become so firmly locked together that both animals perish, after repeated efforts to extricate their horns.

Wapiti are by no means as plentiful in Canada as they used to be. Very few are met with east of Manitoba, although they were plentiful there

years ago. Vancouver and adjacent islands are now their habitat. Disease has decimated their ranks. and left the survivors so weak that a severe winter, on the heels of an epidemic, wrought wholesale destruction. The Indians also killed them in great numbers. A prolonged close season has had beneficial effects, and the latest Government report prophesies a good supply of the game throughout Vancouver at an early date. Wapiti's food consists chiefly of roots and mosses until the severe weather buries the supply. Then they take to the bark of alder, willow, and maple trees. In moving from place to place, they march in well-disciplined order, usually under the generalship of an old bull which heads them. The cows and calves are surrounded by the young bulls, which are ready to beat off any intruder.

The wapiti is the largest of the deer family, but there are other species by no means lacking in interest, and which hold a conspicuous place in natural history. The mule deer, Odocoileus hemionus, ranks next in size. They are called the black-tail by the Cree Indian, the description of which is expressed in the vernacular as kas-ki-che-way-oos. The jumper was another title applied to them by the same tribe—the kwas-kwe-pai-hoos, and also the a-pi-si-mo-soos, or "the little moose." The mule deer is plentiful west of the Rocky Mountains. At one time it was not found far north, but of late years

it has penetrated higher latitudes in numbers. It frequents the districts of East Kootenay, Lillooet, and Chilcotin. It has a summer coat of a pale yellow tint, which grows darker as autumn advances, and ultimately becomes grey. There is a dark horseshoe marking on the forehead, and the throat is streaked by a black band. The lower portion of the legs are cinnamon. Underneath, as well as on the flanks, the prevalent colour is black, shading into a lighter tint towards the middle, and posteriorly a dull The inside marking of the thigh is white. Widening out as it passes over the tail it forms a conspicuous mark on the animal. The ears are disproportionately large for the head, the limbs are excessively strong, and in motion lack the grace of other species of deer. The speed of the animal is determined by the swift bounds it gives—all the four feet leaving the ground and alighting together. Hence, the alternate name of jumping deer given to it by Cree Indians. Its peculiar movement is adapted to the rocky environment where it is found. It also frequents the plains close to well-timbered streams where it browses on the foliage and bark. It was first called the black-tailed deer, owing to its black tip, until the true species of Columbian black-tailed deer was discovered, after which it was called the mule. The species moves about in bands during the winter months, unlike the wapiti choosing an old doe as their leader. The common argument against

female suffrage does not seem to weigh with them. There is no evidence that the bucks object to this masterfulness on the part of the weaker vessel, except that in or about the month of January, the old males leave the drove in twos and threes and shift for them-Natural historians are particular to notice that this act of ungallantry is committed by the older bucks, from whom the conservative element is generally supposed to derive its chief recruits. It is in January that the mule deer sheds its antlers. The destruction amongst the species has thinned its ranks. At one time the droves spread over a vast area, but the wanton slaughter that took place thirty years ago has largely reduced the number. At that time, skins were sold for one shilling each, and the carcases were left to rot by hundreds. Such reprehensible acts, incidental to all new countries, where greed is generally disposed to run amuck, are happily ancient history, and not likely to be repeated in the Dominion. The number of head of deer allowed to each gun is strictly limited, and neither antlers nor hides can be taken out of the country without a Government badge, which is issued to all licensed sportsmen.

The Virginian deer, Odocoileus virginianus, is one of the most common species in Canada. The Cree Indians of the west called it the wap-ai-oos, and those of Northern Manitoba the wep-ai-oos. It is found in most parts of the Dominion which are

removed from civilized life. In British Columbia it inhabits the southern portion of the province and the district east of the Cascade Mountains. This deer depends principally on its power of scent for protection. Like most creatures highly developed in one organ, it is weak in another. The sight of the mule deer is not keen. A man standing still will not frighten it if the wind is not blowing from his direction, and after a while it will begin to browse or move quietly away. Its hearing is very sharp, and any noise, however slight, will put it suddenly to flight. The moment danger is discovered it gives the alarm by stamping its feet, the noise and vibration of which can be heard and felt a good way off. The fawn, when too young for flight. makes a feint of death by lying perfectly still. It will even allow itself to be handled without resistance or concern. In one particular only is the illusion said to be defective—it does not close its eyes. Has Nature failed after all in teaching the full lesson of simulation? I do not think so; it must be borne in mind, in fairness to the great teacher, that in death the eyes do not close. From the point of mimicry. therefore, the posture is a true one. Nature knows her own business best. Actually attacked, the fawn have a peculiar bleat, which the mother hears and responds to instantly.

The moose, Alce gigas, derives its name from the Cree Indian mooswa, and the Salteaux mooz. This

magnificent species is almost ubiquitous. In the waste and uninhabited parts of most of the provinces it is to be found. I came across it in the French River district. During the hot weather they wallow in the lakes, and a short portage from the river brings one upon them. They make their home in the northern interior, and in the Far West, and their nomadic habits take them to territories where they have not been seen before and drive them from others where they were once plentiful.

In summer, keeping near the high mountain ranges, moose go in search of plants and shrubs for food, and will even risk their necks like an enthusiastic botanist in search of a succulent species. They are the largest of the deer order, and are given the alternate name of the flat-horned elk. The moose stands six feet high, measuring from the forefeet to the shoulders, and is nine feet long. The head is narrow, surmounted with big coarse ears ten inches long, which are relieved by the low-spreading antlers. His short neck gives him an apoplectic appearance. The forelegs are longer than the hind, which perches him up in front. Long hair hangs round the neck. and the colours vary at different seasons, between black, brown, and yellow, winter investing him with the lighter coat. The eyes look smaller than they are in reality by being deep-set in the head.

The antlers, of which the bull has the monopoly, are the chief feature. They begin to show at two

years old in the form of two snags, a few inches long. These are cast the following spring, and the prongs grow year by year, passing into fuller development. In the seventh or eighth year they are complete. The antlers are too squat to look graceful, and give the animal a grotesque rather than a dignified appearance, but they subserve their object, as the principal weapon of the powerful beast. A singular appendage which hangs like a purse between the juncture of the neck and head is called the bell. It seems to have no economic purpose, and can only be a rudimentary relic of an earlier stage in development.

On the approach of the rutting season the bulls, which are said to be monogamous, fall an easy prey to the call of a crude horn made of birch-bark. Some hunters profess great skill in the use of this instrument, which is supposed to mimic the bellowing of the cow. It rather discounts the value of the accomplishment to learn that the trick of blowing into the folded hands, known to every schoolboy, is It does not speak well for the equally effective. bull's keenness of discernment that it mistakes the braving of a mule for a moose call, an error of which it is said to be guilty. The monarch's bravery in the mating season is of the finest mettle. He will fight to the death any assailant of his domestic felicity. Two peculiar horn protuberances on the forefeet aid him in combat, and so formidable is the weapon, that the stroke of a bear's paw is scarcely

more destructive. Even the wolf attacking the moose stands a poor chance against such defensive armour.

After the mating season the bulls go off by themselves, and leave the cows in sole charge of their offspring. The latter seem to be in excellent hands, as no wild animal will long brave the mother's anger. The only enemy that they hesitate to attack is man. Their protective instincts stand the young in good stead at such a juncture. Like the deer, they lie perfectly still, and their colour is difficult to detect amongst the rocks and flora of the forest.

Canadian hunters and guides vouch for the truth of the habit of moose "yarding." It seems to be a kind of social function in which a herd tramps round and round a circle in such regularity as to be a crude dance. The Indians call it a "voodoo." The singular habit seems to have no meaning apart from the gregarious instinct taking an unusual form.

There are lonely bulls and solitary cows, which isolate themselves in a hermit fashion. Usually the bulls are old and the cows barren. Hermaphrodite cases have also been discovered.

In British Columbia, moose are found in greatest abundance. The environment of mountain and forest, so suited to their habits, is common there. A canoe trip on the Fraser River touches Bear Lake district, near Fort George, where they are numerous. Proceeding from Petersborough, on the coast, via the Stikine River through Telegraph Creek, is another

resort. Higher up still they frequent Cassiar territory. The finest specimens are found in the northern regions.

The caribou, mus-keek-as-tik of the Western Cree and a-akh of the Salteaux, has two varieties: the mountain caribou, Rangifer montainus, and the Osborn, Rangifer osborni. Naturalists are not agreed as to whether these are distinct species or only Climate and habits work such changes varieties. that the same species develop different characteristics, very confusing to an exact classification. The caribou is the reindeer of America, and has many points in common with the Lapland congener. from 3½ feet to 4½ feet in height, and is 6 feet long. with a short tail, 4 or 5 inches. It is much heavier than the common deer, and lacks its graceful movements. The body is short and thick, and the neck in proportion. Its hoofs are spread to a degree that gives it firm foothold in the snow regions which it frequents. The breadth of its feet also aids it in swimming. hairs, which are tubular and filled with air, add to the buoyancy of its heavy body in the water. In flight it travels at enormous speed, and is capable of outpacing the fastest pursuer. Once away, hunters rarely The body is a greyish dun, growing follow it. lighter towards the throat. The neck is white, the shoulders spotted. The legs are brown, and a white band encircles the hoofs.

When in movement, a pungent substance is

exuded from the glands between the toes, by which the species track each other. Signalling communication is also established in time of danger by the quick movements of the short white tail. Both male and female have horns, the buck's being particularly fine.

The caribou thrives amongst the hills, where pine woods afford food and shelter. They are fond of wandering amongst the swamps contiguous to such places, when the heights are snowbound and food is scarce.

Those that confine themselves to the higher planes do not compare in size and appearance with those that frequent richer feeding ground. It is this fact that accounts for the different varieties.

Fleet of foot as the caribou is, it sometimes shows great cowardice. When one or two in the herd are shot, the others seem paralysed, and do not attempt to take to flight. In crossing lakes, they swim so rapidly that a canoe can hardly keep pace with them. They frequent parts of the Ottawa district, Lake Nipissing, and the northern shores of Lake Superior. The chief home is in British Columbia. The Selkirk Mountains, Chilcotin, and the banks of the Columbia and Stikine rivers are favourite haunts.

The black bear, *Ursus americanus*, is called the musk-wa by the Cree Indians, and ma-kwa by the Salteaux. It is one of the chief specimens of

Canadian big game. Its propensity for wandering makes it difficult to locate. It is so cosmopolitan in this particular, that its discovery anywhere and everywhere is no matter for surprise. found in the very heart of the Rocky Mountains, far removed from all human haunts, and in the orchards close to outlying towns, in the lonely cañon of a Fraser tributary clawing out salmon, and in the shack munching the trapper's dinner. The only time when the black bear seems to rest is when hibernating. Once on the move he wanders far and wide. The male is larger than the female, about 3 feet high, and weighing 600 lb. to 700 lb. They mate in July and August, and about February go abroad with their cubs. generally two in number. The latter play like kittens, and reach adolescence in three years. Their whole life covers a period of about twenty years. The food of bears is varied. Hard up, they will eat anything, and run the risk of their lives to obtain it. Their staple food consists of the bark of trees, which is the first form of diet that they patronize after their long winter's sleep. lie down very fat, curl up, and putting their toes in their mouths, subsist on the store of fat with which their ribs are lined.

On awaking they are thin and hungry, and some of the bark they take is supposed to possess medicinal properties adapted to their needs. In the forest the freshly stripped tree trunks bear witness to

recent visits, though the bears themselves are nowhere in sight. It seems out of keeping with their appetites that insects should form a part of their diet, but the habit of breaking up old logs infested with insect life leaves no doubt on that point. Honey is another favourite dish, and as their thick hides give immunity from the stings of outraged bees, they plunge their heads in a nest without hesitation. Chestnuts and acorns are favourite comestibles. In quest of these they climb trees, and break down the fruit-laden branches. Hunters often surprise them in such situations, but the animal's hearing is so keen that the crunching of a leaf is sufficient to alarm them. Then they drop from the tree with a heavy thud and disappear in the forest.

Impelled by hunger they will attack calves, sheep, pigs or any other quadruped that crosses their path. The coolness with which they enter huts in the night in search of food is remarkable.

Lumber men and trappers have constant experience of this. My Algonquin Park guide came fresh from an encounter in which one of them had been taken red-clawed in theft. The bear got into a hut, where a military captain was sleeping. The animal reared itself on its hind legs against the stove, and scooped out the beans from a saucepan with its paw. The captain, brave enough in warfare, had no liking for crossing swords with that kind of antagonist. He recruited his forces by inviting Mark

to share the hut with him. The next night, during the bewitching hours, the ranger received a dig in the ribs: "Mark, Mark, that divil has come in agin'. Wake up, man."

Mark, tired and sleepy, responded with only a grunt.

"Wake up, man. I tell ye it's the bear, an' there's no pays for him to-night, it's one of us he'll be havin', bedad."

The captain in his excitement betrayed his nationality, but the ranger was obdurate.

"Arrah, Mark avic, do ye hear me now? Shure it's killed and murthered we'll be in our sleep, if ye don't stir yerself. Mark, ye divil, wake up! Bejabers, there he is in the dure."

And, sure enough, the black form of the bear loomed in the first shimmer of the breaking day. Mark levelled his revolver and fired, and the intruder decamped with a growl, the small bullet of the revolver having little effect on his tough hide.

Black bears are for the most part harmless, and rarely attack human beings. In defence of their cubs they are fearless and formidable. The general tendency is to get out of a man's way as quickly as possible.

They travel rapidly, and it is difficult to track them except with dogs. They return to places where they have obtained food, so that it is not very hard to trap them. The sense of hearing and sight is so keen that they are rarely surprised in the thick forest.

The grizzly bear, Ursus horribilis, is in the Cree vernacular mist-a-ya. It is a much more formidable animal than the black bear. It measures 8 feet to 9 feet, and weighs from 700 lb. to 900 lb. It is found in many parts of the Dominion, but in greatest abundance in British Columbia. With the exception of Vancouver Island, it is widely distributed over the interior. For size and strength and general interest it is princeps facile amongst Canadian big game. It hibernates like the black species, and emerges from its winter sleep very hungry. Its marks are discovered on the trees where it has been scratching like a cat, as if sharpening its claws for use after the long period of somnolent inactivity.

For strength the grizzly is said to be unmatched by any beast of prairie or forest. A single blow with its fore-paw will break the neck of a steer or buffalo like a sledgehammer. A rip with its claws on a pine or maple tree will gouge out a wedge, like the stroke of an axe.

With the invasion of civilization the animal has been driven to the mountain fastnesses and the less frequented parts of the Rockies. From East Kootenay to Caribou district he may be tracked, his broader and squarer heel-marks distinguishing him from the smaller species. He lurks in some remote creek, or sheltered ledge of ravine, where he seeks to

live in undisturbed repose. He chooses a place if possible close to acorn and chestnut trees, and within spring of an unwary elk that wanders down to feed on the roots that protrude through the fissures. The only enemy he fears is man, whose powerful rifle he seems instinctively to know and shun. From him, he plunges into the ravine, seeks the cover of the brushwood, or scurries over the steeps dodging behind rocks and sheltering ledges, which shield his broad side from the deadly bullet. In a cul de sac he takes the aggressive, and unless his assailant is well armed, of quick eye, and steady nerve, he stands a poor chance against so formidable an antagonist.

When shot at or slightly wounded the bear has a trick of rolling down the steep, heels over head, like a ball. The pace is so quick, that it is disconcerting to marksmanship. At the most convenient moment he surprises the sportsman by taking to his feet again and speedily escaping. A wounded grizzly is extremely dangerous. With a broken limb or otherwise disabled, he will make an unexpected lunge, and inflict terrible if not fatal injuries.

Trapping is another method of outwitting Ursus horribilis. Powerful spring traps chained to a log encompass his destruction. The weight is sufficiently heavy to handicap his movements, and the trail it leaves enables the hunter to trace him. If he has sufficient time, he is capable of gnawing the wood

into splinters, even when the log is 12 feet long, and a foot in diameter. The carcase of a deer or other animal is the usual bait used for this purpose. The beasts are cunning, and, their suspicions once aroused, it is difficult to entrap them.

Although they usually move off in the presence of man, at times they deliberately attack him. I came across some well-authenticated cases. At Alyeen Lake an old trapper named Dennison was attacked by a grizzly. He called to his nephew, a small boy, to run to the shack for help, but when it came the trapper was found quite dead and frightfully mutilated. During a hard winter, a boy was attacked and killed, and devoured beyond recognition. The lad's boots were the only part by which it was possible to identify him.

Such occasions are happily rare and belong to the early age of colonization, when there were few people about and animals were bolder and more disposed to take the aggressive.

From Lillooet to Caribou, in the northern part of the province of British Columbia, grizzlies may be discovered. A trip along the Skeena or Stikine River and breaking inland on its higher reaches is a certain means of an introduction, more or less exciting, to his bearship. Spring is the best season, when the snow is disappearing from the mountain, and a sprinkling remains on the timbered slopes. His tracks begin to appear about that time, and with a

good guide that knows his business there is not much doubt of an encounter with him in persona propria.

The buffalo, Bos americanus, is called by the Cree the moos-toos. It is, unhappily, an animal that in its wild state only survives in history. It has ceased to form an entity in the big game of the Far West. The magnificent creature may be seen chafing in his pen in Vancouver, or aimlessly wandering in the larger confines of Yellowstone Park. These examples of the American bison are little more than spiritless survivals of the noble beast whose strength and mad rushes across the prairie on thundering hoofs thrilled us in the pages of romance.

Indeed it is only in such records that anything like a true picture of the buffalo remains. It seems almost incredible that within living memory great herds were scattered far and wide over the Western plains. The causes that led to the practical extermination of the buffalo are incidental to exploration and colonization. The early settlers largely subsisted on buffalo meat, of which the herds amongst the foothills offered an abundant supply. It entailed little labour and less cost. Traders bound for more northern regions found the fat of the animal, and its preserved flesh, the best food on which to subsist amidst frost and snow. Miners and adventurers who joined in the rush to the spoil of real or imaginary El Dorados shot them unsparingly, and little was left of great herds but their bleached bones scattered far and wide over the plains.

In looking at the caged specimen in Vancouver Park, one could readily believe the excitement the buffalo afforded to the Indians and early settlers. The strongly shaped body is set on sinewy, powerful limbs. The shoulders rise broad and hog-backed above the massive head, capable of enormous charge in aggression, or withstanding a fierce assault. The horns surmounting the bull-shaped head, short and sharp, comprise a weapon which no hide could resist. A lion's strength indefinitely magnified seems to be embodied in the creature which watches one suspiciously with its black eyes overshadowed with a matted mane of thick short curls.

As long as the North American Indians had no weapons more formidable than the bow and arrow, the decimation of the buffalo was impossible. The introduction of the muzzle-loading gun and rifle was not in itself calculated to effect rapid extermination, but combined with skilfully organized methods, destruction proceeded at a more alarming rate. Then came the improved rifle and with it the doom of the fine beasts was sealed. A fresh impetus was given to the butchery by traffic in buffalo hides. The coin given in exchange was at first nothing more than the fiery liquor vended by unscrupulous traders. A cupful of this was the price paid for a well-dressed buffalo robe. The infatuation of the Indian tribes for this beverage

stimulated their zeal for accumulating skins, and wholesale slaughter was the result. Every hide was bartered, down to that covering the Indian's sleeping child.

Fearful of the consequences that might ensue when the Indians awoke from their drunken sleep, the cunning traders stole off in the dead of night to carry on their nefarious commerce in a more distant camp.

It would be unjust, however, to saddle the Indian and the vendor with the entire work of extermination. A legalized trade in buffalo hides sprang up. Going back to 1843, the following particulars appear in official reports. "The average annual returns for eight or ten years amounted to 90,000 robes, made up as follows: American Fur Co. 70,000, Hudson Bay Co. 10,000, all other Companies probably 10,000."

Rifles of large calibre made it possible to stalk the buffalo at a much longer range. A deadly shot under cover has been known to kill the greater part of a herd without moving from his position. The choice meat so easily procured was sold as low as $2\frac{1}{2}d$. a pound, for as a rule the hunters encumber themselves with nothing more than the buffalo hams.

The big-horn sheep, Ovis canadensis, the mai-atik of the Crees, are found in the Rocky Mountains from the coast to the Arctic Circle. Protection has been extended to them in the Gold Range in Okanagan, and on the coast in the Ashnolo Mountains. In



ROCKY MOUNTAIN BIG GAME. A BANFF BUFFALO



south-east Kootenay they are plentiful, and in the Lillooet district on the Eastern Coast Range.

Considerable variety has been developed in consequence of environment. The Rocky Mountain specimens found on the rugged heights are thicker in the horns than those of Lillooet, which are more slender, having a wider spread and finer points. The Ovis stonei variety is abundant in the Cassiar locality. Good specimens have been found round the headwaters.

In Atlin the saddle-back variety, Ovis fannini, are found, and generally through the North-West Territories. The Yukon sheep, Ovis dalli, frequents the territory from Teslin Lake to the McMillan River, which can be most conveniently reached from Atlin.

The big-horns go in flocks, occupying steep ranges, difficult of access. A sentinel is generally in charge, sharp of eye and quick of ear to give the alarm in times of danger. Mountain sheep possess great agility, and leap from rock to rock with marvellous sure-footedness. Their feet are provided with a pad which clings to the rocks and aids them in their perilous saltatory movements. The habit attributed to the Ovis canadensis of saving itself by alighting on its horns is questioned by some naturalists and hunters. Catlin refers to it and states that he saw one fall from a considerable height on its horns, and afterwards bound away unhurt. The battered and broken condition in which the appendage is often found to some extent

accounts for the belief. This, however, may be caused by fighting. The horns grow, in some cases, to 17½ inches round the base, and 38 inches long. The animal itself is about 3 feet high. Its coat is a reddish brown colour, which turns to grey in winter. It is patched with white in the rear, and is entirely white underneath. The hair is very coarse and stiff.

The mountain sheep, Oreamus montana, is found in the Rocky Mountains and in South and East Kootenay. In the spring it approaches the lower levels to crop the young vegetation. The snapping of a twig or the displacement of a stone puts them to flight. Comparing the Ovis canadensis with the Ovis stonei, the horns of the latter are longer, and curved farther round. Those of the Ovis fannini almost complete the circle. The diversity applies to the rams; the sheep's horns rise erect from the head, curving slightly.

The mountain goat, Oreamus montana, is also found in the Rocky Mountains. They keep nearer to the coast, where there are lofty crags suitable to their habits. Like the sheep they are fond of spring vegetation, and leave the heights in search of it. Their home is, however, the rocky cliffs, far detached from pass or trail trodden by human feet. Their fleece is white, with an undergrowth of fine wool. Long hairs grow on the sides and down the legs. Bristles stand erect on the back. The legs are short and the hoofs broad. The horns curve backwards and are about 12 inches long. From the base, rings form

half-way up; the rest is smooth, and the extremities a jet black and sharply pointed. Nature is not invidious in the bestowal of these horns, which are conferred on both sexes. The fleece is spun into yarn by the Indians and woven into coarse blankets. The agility of the mountain goat is not equal by any means to that of its congener, the sheep. When disturbed, it is more disposed to lurk behind the nearest rock than to take to flight. Their clumsy appearance does not suggest speed. Their safety consists in the high altitudes which they reach, in many places inaccessible to anything but themselves. When the snow interferes with their provender they frequent the lower timbered reaches and browse there. The young grass that begins to grow when the frost relaxes its hold is the only thing that tempts them to leave their rocky fastnesses. is in these lower reaches that they become the comparatively easy spoil of the hunter's rifle.

The mountain goat is not much sought after by the North American Indians. It entails too much climbing, and the blankets its fleece provides have been superseded by a warmer and cheaper manufactured article. There is no scarcity of the animal at present, and its possible extinction is regarded as a remote contingency. It will probably seek the protection of still loftier crags as civilization invades its territory. Like other mammalia of the Far West it will probably grow in wariness and

aloofness. One can only hope that this will be so generally amongst the big game, in order that they may not share the fate of the magnificent, and at one time ubiquitous, buffalo.

Whether one goes armed with rifle or fieldglasses it is important to secure the services of a competent guide. This is not difficult, as trustworthy men are to be found. In the busy season it is necessary to book them in advance; the best are naturally in demand, and the second best is a doubtful quantity. Guides supply nearly all the essentials of an excursion: tents, blankets, canoes and also the commissariat. Clothing should be light, of woollen material. Guides naturally object to carrying anything beyond essentials. Along the coast the expense is comparatively small, as travelling is done for the most part by water. Going inland pack-horses are necessary, the cost of which varies. In Chilcotin and Lillooet they can be hired for about 2s. a day. Saddled horses 3s. In Cassiar and Kootenay the price runs from 8s. to 9s. A complete outfit, including provisions, costs from £2 to £3 per diem.

August is the best time of year to start on a biggame excursion. Sheep and goats are in good condition then. In October moose and caribou are in their prime; their antlers have become set and past the velvet stage. Bears are not in condition until spring, and shooting them in the autumn is

IN THE HEART OF THE ROCKIES



wanton destruction. Wapiti present all their attractions to the naturalist and sportsman in December. There is a chance for a wolf and cougar during that month. In spring the bears emerge from their winter sleep, and their fur is in excellent condition.

They feed in places where the snow avalanches have scoured the mountain side, and new vegetation is awakening at the touch of spring's vitalizing breath. Grizzlies are never far from the inlets, and throughout Kootenay and Lillooet districts they are pretty sure to be found.

In the autumn and winter wild-fowl shooting can be varied with the more strenuous quest for horned game, and early trout and salmon fishing with the pursuit of the black bear and the grizzly.

CHAPTER XIX

Reflections—Conditions of success—Social environment—The lonely life—Minimizing temptation—The Liquor Laws—Local option—Native sports—The domination of commerce—Belated literature and art—Canadian writers—Historians, poets, and novelists—Religious zeal—Commercial expansion—Insular sentiment—Cosmopolitan practice—Transatlantic steam service—Returning through the St. Lawrence—The closed and opened book—Changed times and manners—Reading the riddle—Canadian Boat Song—Symbols in the western sky—The last glimpse of the Golden West.

It is impossible to travel 10,000 miles through Canada and study its great natural resources, mark the civil and commercial development that has taken place, without arriving at definite conclusions.

The mental crystallization of such observations and reflections has been reserved for my closing words.

Canada offers exceptional opportunities to young men and women of intelligence and industrious habits. It is no place for the indolent, impatient or physically weak. The goal of success is practically certain, but the road to it is often rough, and it is possible to faint by the way. Labour is so scarce that there is no difficulty in obtaining work and good wages, but for precisely the same reason a quid pro quo must be rendered in the shape of strenuous toil. The life is open and healthy and, given a good constitution, it cannot fail to be interesting.

In farming in the Western Provinces food and housing are included, and as the opportunities for spending are few, savings rapidly accumulate. the other hand there is the loneliness of the prairie and the sense of detachment from the social environment. Some have been unable to bear this, and have been known to run away from it. It may be advisable to seek an opening nearer one of the centres of population, where money-making is equally certain, but the pace is slower. Leading men in Parliament and connected with labour bureaus share this opinion. But near large towns and cities there are inducements to spending which in themselves are temptations unknown in more remote districts. Progress is consequently retarded, and there may be a very good reason for going further afield. It all comes back to the question of the character and temperament of the man. Whatever be the locality, town or prairie, it is idle to be attracted to Canada for the "soft jobs" it offers. There are none. A man will reap the highest reward of his industry, but industry it must be, and of the highest order. He who goes for the purpose of gambling in mines or land may find a short cut to fortune-or ruin. It is after all a gamble, and there is no knowing which thimble the pea is under.

Some of the temptations that beset life at home are to a large extent removed from the path of the Canadian settler. The drinking habits are less prevalent than in European cities. Tea and coffee largely take the place of alcoholic beverages. Dining restaurants are in no cases licensed for the sale of intoxicants. The public-house [as an institution is unknown. The only place where drink can be publicly obtained is in the saloons connected with hotels, which must justify their existence by providing a definite amount of sleeping accommodation.

The principle of local option in regard to the saloon system further indicates the condition of public feeling on the liquor traffic. It was introduced by Senator Scott in the form of a Temperance Act and allowed electors in any county to decide by vote whether the sale of intoxicant liquors would be permitted within their respective districts. The Act has checked the growth of saloons generally, and in places has led to their complete prohibition. In the province of Manitoba the people pronounced in favour of total prohibition, although an attempt to procure the same principle in the provinces of Ontario and Quebec was defeated by an overwhelming majority.

These provisions by no means make drinking impossible, but it is an undoubted check on the habit.

The law in regard to drunkenness itself is strict. It is an indictable offence to be in a state of intoxication. The fact, apart from violence or disorderly conduct, leads to arrest, imprisonment, or a heavy fine. All public-houses are closed on election days and Sundays, when trading, sports, and games are also prohibited.

The northern climate of Canada is too cold on the whole to give scope for all the sport so general in Australia and the Mother Country. The Canadians have, however, excelled in sculling, the practice of which may be seen carried on on all the great rivers adjacent to large towns. Their national game is lacrosse, said to be of Indian origin. The long winters enable them to indulge in all the exhilarating snow sports—ski-ing, tobogganing and sleighing—in all of which the Canadian is a past master. The ice carnivals at Montreal are universally famous.

The many opportunities which the Golden West affords has a tendency to monopolize the energies of the inhabitants to the exclusion of other interests of civilized life. In the eager desire to grow rich the æsthetic side generally suffers. Even in the great cities the commercial spirit dominates everything. Canada has yet to produce its great masters in art and literature. One might have expected a French Canadian literature, but its growth was checked at the outset by the discouragement of the Roman Catholic Church, which prohibited the perusal, not

only of modern Parisian works, but even many French classics. Surveillance has been even exercised over the catalogues of the booksellers, and a strict censor-ship imposed.

Canadian history has received careful treatment at the hands of Abbé Casgrain, who has written a history of Montcalm and Lévis. Dr. Kingsford's ten volumes on Canada are a comprehensive work, but lacking the lighter touch which characterizes Francis Parkman, who has dealt with the subject of the North American Indians and the early pioneers. Sir John G. Bourinot has treated the constitutional history of Canada with impartial fidelity. The editor of "The British Weekly," in one of those vivid literary sketches of which he is the greatest modern master, unearths in an article on "The High Destiny of Canada" names almost forgotten in the literary world-Abel Log, Charles Greatrex, T. C. Haliburton-who wrote under the nom de plume of Sam Slick-and Joseph Howe.

Goldwin Smith is a well-known writer on Canada. The magic spell in his work is infectious and is its most enduring phase.

Of poets, whilst as yet there is no nightingale, there is many a sweet songster, such as Bliss Carman, Charles G. W. Roberts, and Wilfred Campbell. Dr. Drummond has touched the most humane chord in his description of the habitant—in cabin and canoe, by forest and stream, the life of the settler is sung.

A GRAND WATER FRIE

The novel has found a champion in Sir Gilbert Parker, who, Canadian born, has made London his home. On historical basis he weaves cunning plots shot with charming romance.

With him may be associated names less familiar but distinctively contributory to the deepening and broadening literary source, such as Miss Dougall and Mrs. Coates.

The hovel with a purpose has found its chief advocate in Ralph Connor (Rev. C. W. Gordon). The cañon of the Rocky Mountains, the setting of the lumber camp, the lode gold streak in the miner's rough nature are his themes, and skilful has been the handling, as of one who has his vision of the coming of the Divine Kingdom and prepares for it a way amongst the increasing inroads into the Golden West.

Canada is moving towards the realization of all the institutions that make for a people's stability and worth. Her religious zeal is marked in commodious churches, and the catholicity of her mission in a movement towards union. Already Presbyterians, Methodists, and Congregationalists have cast an overwhelming vote in favour of the formation of the "United Church of Canada." Like her streams near their source, that have travelled separately and independently, they seek a new power and strength by merging in one, and sweeping onward toward a common goal.

The trend of her commercial interests is in the same direction; walls of partition are being levelled which are opening to them the markets of the world. In blood and loyalty Canada is insular, and is likely to remain so; in trade and commerce she is cosmopolitan. She grasps the hands that stretch across the Atlantic on the east and the Pacific on the west, and so links the world.

I returned by the Canadian Northern transatlantic steamer, sailing in the "Royal George" which with its companion the "Royal Edward" is distinguished for quick passages. The vessels sail to and from Bristol instead of Liverpool, which is the port of the Canadian Pacific line. The "Royal George" averages 20 knots. The commander. Captain James Harrison, served his apprenticeship on the full-rigged ship "Abcona," famous for smart passages. He was master of the old "Valkvrie III." which in 1895 competed for the American Cup. The captain of the "Royal George" has had a distinguished career in life-saving. Whilst master of the "Volturna" he rescued a crew of 28. he commanded the lifeboat of the Allen liner "Manitoban" and rescued 32 from the "Montague" steamer. Sixty Frenchmen were saved by him. For these and other acts of bravery he has received awards from the United States and Newfoundland Governments.

As we sailed down the St. Lawrence from Montreal, memories of the delightful trip were

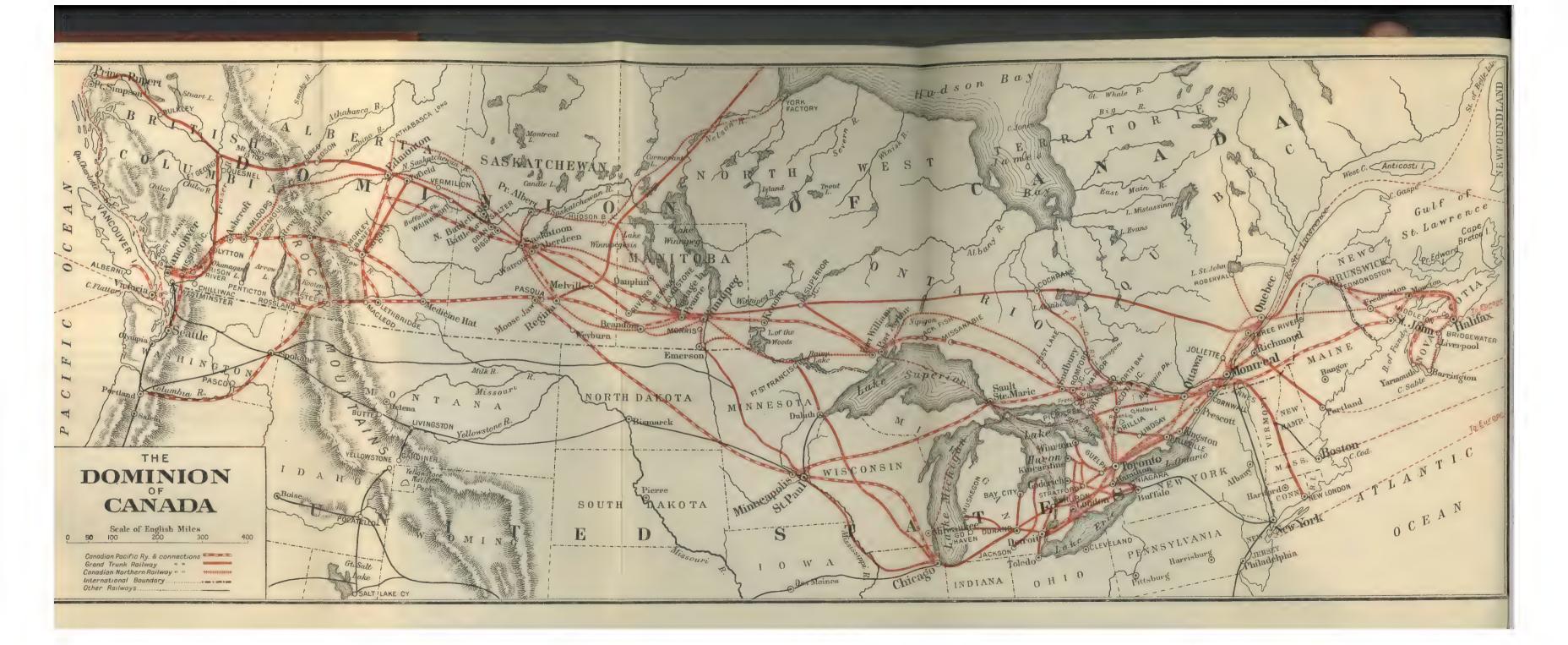
revived. Months had passed by and it only seemed like yesterday since the rapids lapped the sides of the "Empress of Ireland." The great continent was then a book about to open its pages. Although too huge a volume to become familiar even to the life student, pages here and there had been mastered, and pictures had left behind their indelible impress. The shores of the St. Lawrence, the scenes of explorers and trappers, of Iroquois and Hurons, on repassing had a new significance. Across the waters came the cry of the loon, the lost soul of Indian legend, and once more recalled the trapper in his birch canoe silently gliding amongst the rapids of the French River.

The outskirts of the forest were still dusk and mysterious, but the riddle has been read, the impenetrable wild has been mastered and the cleared land, with smiling orchards and lowing kine, declared the victory of patience and industry. Near the banks where once the dusky figure of the red Indian stealthily moved, a boat appeared, and the rhythmic stroke of oars marked a new era of comradeship. Amongst the rugged cliffs, where once the fierce warcry found answering echoes, rise and fall in melodiousness the notes of Moore's Canadian Boat Song—

"Faintly as tolls the evening chime,
Our voices keep tune and our oars keep time.
Soon as the woods on shore look dim,
We'll sing at St. Anne's our parting hymn.
Row, brothers row, the stream runs fast,
The rapids are near and the daylight's past!"

As the day hastens to its close, the western sky is once more lit up with wonderful tints. The sun dips behind the river, but its trailing garments sweep the azure floor of Heaven. The red of the maple, the purple of the mystic mountains, gold and silver threads of the mine, seem to be woven into the fabric and proudly displayed as samples gathered from the broad path over which the great luminary daily travels.

A long last look, the curtains of night close in, and the Golden West fades out of sight.



APPENDIX

GAME LAWS IN THE PROVINCES OF CANADA

THE PROVINCE OF QUEBEC

SHOOTING

Deer and moose from Sept. 1st to Dec. 31st inclusive.

Caribou , Sept. 1st to Jan. 31st ,,

Bear ,, Aug. 20th to June 30th ,,

EXCEPTIONS.—In Ottawa and Pontiac counties deer and moose opens October 1st and closes November 30th.

REGULATIONS

Not more than one moose, two deer, and two caribou may be killed in one season by any one person. All deer, moose, or caribou killed must be over one year old. No cow moose must be killed at any time.

LICENCE

Non-resident's season licence, £5. Not transferable.

FISHING

Salmon	from	Feb. 2nd to Aug. 14th inc	lusive
Trout (speckled)	,,	May 1st to Sept. 30th	,,
Trout (grey)	,,	Dec. 20th to Oct. 14th	1)
Pike and pickerel	* 11	May 16th to April 14th	11
Bass	,,	June 16th to April 1st	19
Maskalonge	,,	June 15th to April 15th	,,
Whitefish	,,	Dec. 1st to Nov. 30th	,,
Ouananiche	"	Dec. 1st to Sept. 30th	,,
ប		289	

LICENCES

Trout and coarse fish, non-resident's season licence, $\pounds 2$. Club members, $\pounds r$.

Salmon, £5.

NEW BRUNSWICK

SHOOTING

Deer, moose, and

caribou from Sept. 15th to Nov. 30th inclusive.

Mink, fisher, sable , Nov. 15th to March 31st ,

REGULATIONS

No more than one bull moose, one caribou, and two deer may be killed.

LICENCE

Non-resident's season licence, £10.

FISHING

Salmon angling from Feb. 1st to Aug. 15th inclusive. Trout (all species) ,, April 1st to Sept. 30th ,, Bass. No close time.

LICENCE

All fishing free.

NOVA SCOTIA

SHOOTING

Moose Hares, rabbits, mink Grouse, partridge from Oct. 1st to Jan. 1st inclusive.

" Nov. 1st to Feb. 28th,

Grouse, partridge ,, Oct. 1st to Nov. 30th Duck, teal, snipe,

woodcock " Aug. 20th to Feb. 28th " Otter, fox. No close season.

APPENDIX

REGULATIONS

Caribou, deer, beaver, protected. Two male moose only to be killed.

In Cape Breton

All birds from August 20th to February 28th inclusive. Caribou, deer, beaver, moose, pheasants, partridge, spruce, protected.

LICENCE

Non-resident's licence, £6.

FISHING

Non-resident's licence for season, $\pounds 2$. For three months, $\pounds 1$.

ONTARIO

SHOOTING

Deer	from	Nov. 1st to Nov. 15th inc	lusive.
Duck	,,	Sept. 1st to Dec. 31st	,,
Geese and swans	,,	Sept. 15th to April 30th	"
Woodcock, partrid	ge,		
grouse, pheasant	s "	Sept. 15th to Dec. 15th	"
Hares	,,	Oct. 1st to Dec. 31st	,,
Plover and snipe	"	Sept. 1st to Dec. 15th	,,
Squirrels	23	Nov. 1st to Dec. 1st	33

REGULATIONS

Two male deer, one male moose and caribou only to be killed.

South of main line C.P. Railway.

Moose and caribou from Nov. 1st to Nov. 15th inclusive. North of the railway.

Moose and caribou from Oct. 16th to Nov. 15th inclusive.

LICENCES

Non-resident's licence, £10. Resident's deer shooting, 8s. 4d. Moose and caribou, f_{1} .

FISHING

Salmon	from	Dec. 1st to Oct. 31st incl	usive.
Maskalonge	,,	June 16th to April 14th	**
Bass	,,	June 16th to April 14th	"
Trout (speckled)	,,	May 1st to Sept. 14th	,,
Trout (grey)	,,	Dec. 1st to Oct. 31st	"
Pickerel	,,	May 16th to April 14th	,,
Whitefish	"	Dec. 1st to Oct. 31st	,,

REGULATIONS

Bass in Lake Erie west of Point Pelée, season, July 16th to May 26th inclusive. The close season for whitefish in Lake Erie and St. Clair bordering on the counties of Essex. Kent, Haldimand and Monk, and the close season for pickerel in Lake Huron and St. Clair River off the county of Lambton have been abolished.

Bass limit, 8 per day. Maskalonge limit, 4 per day. Pickerel limit, 12 per day. Speckled and brook trout limit, 30 per day.

LICENCE

Non-resident's season licence, 8s. 4d. Single families, £1.

MANITOBA

SHOOTING

Moose, caribou, elk,

antelope, and reindeer from Dec. 1st to Dec. 15th inclusive. Grouse, chicken,

```
partridge
                        " Oct. 1st to Oct. 20th
Plover, woodcock, snipe " Aug. 1st to Dec. 31st
```

Swan, geese, duck from Sept. 1st to Dec. 31st inclusive.
Fisher, sable ,, Nov. 1st to March 31st ,,
Marten ,, Nov. 1st to April 15th ,,
Muskrat ,, Nov. 1st to April 30th ,,

REGULATIONS

Moose, caribou, elk, antelope and reindeer limit, 1 male. Duck, geese, swan, limit, 20 birds per diem or 100 per season.

LICENCE

Non-resident's licence for season (British), £5, (alien), £20. Residents, 8s. 4d.

SASKATCHEWAN

SHOOTING

Moose, caribou, deer, elk from Dec. 1st to Dec. 14th inclusive. Antelope Oct. 1st to Nov. 14th Otter Nov. 1st to April 30th Muskrat Nov. 1st to May 14th Mink, fisher, marten Nov. 1st to March 31st Swan, geese, duck, snipe, landrail. plover, curlew, coots ... Sept. 1st to Dec. 31st Grouse, partridge, chicken Sept. 15th to Nov. 30th Cranes Aug. 1st to Dec. 31st ,,

REGULATIONS

Moose, caribou, deer, elk limit, 2 males to each person. Grouse, partridge, chicken limit, 10 per diem or 100 per season.

LICENCE

Game licence for season, \pounds_{20} . Bird licence for season \pounds_{10} .

ALBERTA

Moose, caribou, deer from Nov. 1st to Dec. 1st inclusive. Antelope Oct. 1st to Nov. 1st Goat and sheep " Sept. 1st to Oct. 15th Otter, muskrat " Nov. 1st to April 30th Fisher, mink, marten " Nov. 1st to March 31st Swan, geese, duck ,, Aug. 24th to Dec. 31st Grouse, pheasant, partridge, chicken .. Oct. 1st to Nov. 1st Crane, snipe, plover, curlew Sept. 1st to Dec. 31st

REGULATIONS

Moose, caribou, red deer limit, r male. Antelope limit, 2 males. Goat limit, 2 males. Sheep limit, 2 males. Grouse, pheasant, partridge, chicken limit, 20 per diem, or 200 per season.

LICENCE

Non-resident's season licence, big game, £5. Birds, £3. Resident's, 10s. Resident's guests, 8s.

BRITISH COLUMBIA

SHOOTING

Moose, caribou, elk from Sept. 1st to Dec. 31st inclusive.

Deer , Sept. 1st to Dec. 14th ,,

Sheep and goat , Sept. 1st to Nov. 14th ,,

Beaver , Nov. 1st to March 31st ,,

Otter and marten , Nov. 1st to Dec. 31st ,,

Hares , Sept. 1st to Dec. 31st ,,

REGULATIONS

Moose, females and calves, protected, bulls limit, 2. Deer, fawns must not be killed under 1 year old, adult limit, 5. Caribou, females and calves protected, bulls limit, 3. Elk, females and calves under 2 years old protected, bulls limit, 2. Sheep and goat, ewes and lambs protected, goat limit, 3, rams, 2. Rams in Kootenay district limit, 1.

Selling or buying heads of moose, caribou, elk or sheep is strictly prohibited.

LICENCES

Non-resident's licence, £20. Military men of British Army and Canadian Militia in service in the province are excepted.

FISHING

Salmon, no close season.

Trout (grey) from Nov. 14th to Sept. 30th inclusive.

Trout of all other

species ,, Jan. 1st to Sept. 3oth ,, Sturgeon ,, July 16th to May 31st ,,

Whitefish ,, Nov. 14th to Sept. 30th

LICENCE

Non-resident's, £1.

EQUIPMENT

CAREFULLY selected equipment adds materially to the success and pleasure of a Canadian trip. A large part of the camping outfit can be purchased or hired on the spot. Good tents, cooking utensils, and tinned provisions can be procured from the Agency which provides the guides.

There are certain things that are best not hired; blankets, rugs, and mackintoshes should be personally provided. At the end of the trip a sense of gratitude will probably suggest their presentation to the faithful attendants. It is rarely advisable to retain them.

Where pack-horses are not used, and guides have to carry tent, provisions, etc., the equipment should be as light as possible and few articles duplicated.

For purposes of photography I took a half-plate "Instantograph" with a stereoscopic lens. The scenes are so magnificent and full of detail that the larger the camera is, the better; most of those in the foregoing pages were taken with a whole plate. There are places where it is impossible to carry, or even set up so large an apparatus, and a second and quickly adjusted camera should be slung round the shoulders in readiness. I found a folding "Clito," with "Ensign" lens convenient, but in the fierce light a thick cloth should be used to protect the slides, and nothing but backed plates

should be used. It is necessary to climb to get the best results, and at times to descend into creeks and canons where both hands are needed for personal safety.

A good field glass for purposes of natural history is indispensable. My equipment for salmon angling consisted of a 16-ft. split cane fly rod. This will be found equal to cope with any of the species that rise to the fly. Cohoes are the most likely to prove game for that kind of angling, and they only run in size from 4 lb. to 8 lb. or o lb., and correspond to the grilse of Ireland and Scotland in fighting power. For trolling with spoon bait in the Pacific, I used a 10 ft. 9 in. long split cane spinning rod, and found nothing that it could not control and play efficiently. For large spring salmon I had a much heavier rod, 11 ft. long, greenheart make, and very stiff in the build. This is necessary not only to hold the monsters one may meet, but also to bear the strain of a 3-in. spoon drawn through the water. For trout fishing with both wet and dry fly a good 10-st. split cane rod is all that is needed. For spinning, the light trolling rod used for salmon, with a longer and more flexible top, is equal to the strength and activity of lake trout, and lends itself to mounting fine tackle. Both of these rods are also suitable for fly fishing and spinning or trolling for bass. The heavy trolling rod can also be used for maskalonge, and the light one for pike or pickerel. Reels of salmon and trout make should be of the usual size for the rods described. A large-sized trout net and a telescopic gaff-cover are required for landing the quarry. Tackle is fully described in the main text; it should be carefully selected and of the best quality.

INDEX

"ABCONA" ship, 286 Aberdeen High Schools, 22 Abraham Plains, 16 Agassiz, 153; hop growing in, 169 Alaska, tyee salmon, 198 Alberta College, 131 Alberta Province, 127; climate and resources, 137-143 Albreda Lake, 232 Aldermere Lake, 166 Alexander Club, 191 Alfalfa in Alberta Province, 141 Alkali Creek, 206 Alyeen Lake, big game, 271 America. See United States American Fur Company, big game, 274 Angling in Lake Eric, 34-39; in Park, 64-70; French River, 84-88; in British Columbia, 197-245 Ante Costa, 10 Arthur, Port, growth and industries, 119, 120 Arundel, Earl, and Jean de Brébœuf, 113 Ashnolo Mountains and big game, Athabaska Lake, 163 Athabaska River, 138, 139 BADCOCK, Mr. John Pease, on Salmon Fisheries, 204, 236, 238 Baden-Powell, Lieut.-Gen. Sir S. S., 1, 3, 4 Bancroft, iron deposits in, 44

Bankhead, 148 Barrie, 51 Bass fishing on Lake Erie, 34-39; on French river, 83; in Temagami, 99-101 Bear, The black, description and habits, 265-269, 279 Bear, The grizzly, description and habits, 269-272; in Seymour Creek, 228, 229 Bear Lake, big game, 263 Beaufort House, Quebec, 18 Beaver, The, in Algonquin Park, 55; habits, 60-62 Beaver Pass and game birds, 249 Bee farming, 33 Bell Isle, Straits of, 8 Bellevue Island, 92 Big Bar Creek, 206 Bigwin Island, 92 Birdwhistle, Captain R. T., 5 Black Bay, 117 Black game, 248, 250 Blairton, iron deposits at, 44 Board of Trade, report Niagara water-power, 42 Bow River, 145 Boy scouts, 1-5 Brébœuf, Jean de, II; and Lalemant, 17, 18; and Earl of Arundel, 113; adventures on Lake Huron, 105; massacre of, 113 Brandon mills and model farm, 134, 135 British Association The, on Canadian wheat, 140 British Columbia, students, 24;

salmon, 86; irrigation of, 149; Crown Colony of, 161; saw mills of, 167; farming, etc., 168-171; salmon species, 198-200; distribution of fish. 202: destruction of salmon, 203, 204; angling for, 205-218; fisheries reports on, etc., 234-238; Virginian deer, 260; moose, 263, 264; caribou, 265, grizzly bear, 269, 271; buffalo, 272; big horn sheep, 274, 275; mountain goat, 276; big game expeditions in, 278, 279
British Weekly," The. See " British Nicoll, Sir W. Robertson Brock, Mr. R. W., on Porcupine goldfields, 48 Brook trout, the, species, 201 Brule Lake, 164 Buffalo, 153, description and habits, 272-274 sion through, 165, 166

Buffalo mine output, 45 Bulkley Valley, Railway exten-Butter-making, 34 Buttles Lake, 224 CABOT'S Head, Georgian Bay, Cache Lake, Algonquin Park, 52 ; Muskoka, 64 Calgary on C. P. Railway, 132; on C. N. Railway, 143; population and progress, 144; lumber trade, 145; Government buildings, 150 California salmon, 198; game birds, 251 Cambell, Wilfrid, Canadian poet, 284 Campbell Lake, 224 167; record Campbell River, salmon of, 199, 224 Canadian art and literature, paucity of, 283; writers, 284, 285 Canadian Boat Song, 25, 287 Canadian Copper Company, 43 Canadian drinking saloons and

local option, 282; control of, 283 Canadian early settlers, French, 18 Canadian geographical survey on climate and crops, 142 Canadian history, 284 Canadian Manufacturing Society on Emigration Bill, 180; on taxation, 186 Canadian Northern Railway and mines, 44, and colonization, 97; routes, 99; and Port Arthur, 119, 124, 127; Winnipeg to Edmonton, 128, and Morinville mines, 132; through Saskatchewan, 135; prospective lines, 143, 166 Canadian Pacific Railway and Porcupine goldfields, 46; Sudbury mines, 75, and colonization, 97; extensions, 99; alternate routes to British Columbia, 103; at Jackfish, 117; Fort William, 120; Edmonton to Calgary, 132; through the prairies, 134, 143; through the Rocky Mountains, 148; engineering feat, 150; completion of line, 161; prospective line, 162, and Fraser River, 205; creeks near, 207 Canadian sports, 283 Canadian ruffed grouse, 249 Canadian creek and Fraser River. 206 Canoe Lake, 62; angling on, 64 Canoeing, 58-74 Canmore and National Park, 148 Canvas back duck, the, 248 Cape Mudge, 225 Capercailzie, the, 250 Capilano Creek angling, 222 Cariboo, 162; game birds, 248; big game in, 255, 269, 271 Cariboo Island, 116

Caribou, the, description and

Carillon rapids, Champlain as-

habits, 264, 265

cends, 25

Carman, Bliss, Canadian poet, 284 Cartier, Father, 11, and Island of Bacchus, 16; and Montreal, 21 Cascade Mountains, 148; game birds, 249, 250; big game, 260 Casgrain, Abbé, historian, 284 Cassiar, 162; big game, 254, 264, 275, 278 Cassiar mines, copper, 159 Cattle industry, 142 Cave of the winds, 40 Cayoose River, 207 de, early Champlain, Samuel pioneering, 11; on St. Lawrence, 13; Lake of, 14; plot against, 17; at St. Anne de Bellevue and Ottawa River, 23-27, 80 Cheese industry, 34 Chilcotin big game, 258, 265, 278 Chiliwack root crops, 169; steamer route, 207, 208; Vedder River angling, 230; wild duck of, 247, 248; grouse, 248 Chinook salmon, 198 Chinook wind, 136, 139 Coates, Mrs., novelist, 285 Cobalt mining, 44; Mr. T. W. Gibson's report on, 45, 46 Cochrane, Mr., on Porcupine goldfields, 48, 49 Cockburn Island, Lake Huron, 104 Cohoe salmon species, 198, 199; angling for, in the Pacific, 222 Columbian black tail deer, species, 258 Columbian Exhibition wheat. award, 141 Columbia River at Vancouver Island in Kootenay district, 161; salmon ascending, 202; in Ouesnel district, 233 Columbia salmon, chinook species, 198 Common trout species, 201 Comox, 166 Comox Bay, 167 Concert on "Empress of Ireland," 5-7

Concrete quarries, 160 Congregationalists, Canadian. 126; and United Free Church of Canada, 285 Conservators Commission and utility of National resources of Canada, 54 Copper mine districts, 159 Corkscrew River in Algonquin Park, 58; canoeing on, 60-62 Corriagas mine, output, 45 Cost of living in Canada, 176-178 Congar. See Wolf Cranberry Lake, angling in, 55 Crewe, Earl, and emigration laws, Crippen, Dr., news of arrest by Marconi, 8 Crown Reserve mine, output, 45 Cummings, Mrs. Willoughby, appointment to Government office, 191 Curlette, Margery, B.A., appointed on Toronto University Senate, 191 Cypress Hills stock farming, 136 D'AIGUILLON, Duchess of, 17 Dacota connection with Sault Ste. Marie Railway, 116 Dairymen's Live Stock Association, cattle importation, 170 Dawson, Dr. George M., on gold distribution, 157 Deer, 67; habits of, 68; and wolves, 73, 74 Demons, Isle of, stories of, 8-10 De Monts' expedition, 11, 12 De Zurban, Art of, in Hotel Dieu, Diamond Cape and Montgomery's death, 16 Dog salmon, species of, 198; description of, 200 Dog Creek and Fraser River, 206 Dolly Varden trout, angling for, 68-69, 231; classification of,

201; description of, 202; in British Columbia, 233

Dominion Board of Trade and Returns, 124 Dominion Government and British Columbia, 161; railway extension agreement, 163; reserve, 164; report from Labour Department, 174; emigration, regulations of, 179; deputation to, on tariffs 181-187; women appointments, 191; petition to, on fisheries, 237 Dominion Nickel Company, at Sudbury, 43 Douglas pines in Rocky Mountains, 151; latitude of, 167; destruction of, by fire, 228 Dorset centre for angling, 93, 243 Drummond Lake, trout angling centre, 64 Drury, Mr. E. C., on tariff, 183 Duck, in Ontario, Lakes Erie and Huron, 246; species, 247; French River, distribution of, 247

institutions, 131; coal mines, 132; Calgary, 146; Board of Trade exhibits, 132
Education problems and institutions in Quebec, 20-22
Ellick, an Ojibwa guide, 77, 78, 89
Engelhart, Mr., 97
Erie, Lake, canning industry, 33, 34; angling on, 35-39; final struggle of North American Indians on, 114
Emigration Laws, 178-181
"Empress of Ireland," 1-5, 286
Esquimalt and Nanaimo Railway,

EAGLE River, 152; angling centre,

Edmonton, 127; progress and

cline, 241-243
FAIRVIEW Island, 92

Evans, Mr. Kelly, on trout de-

FAIRVIEW Island, 92 Fairy Lake, 90 Fiddle Mountain, 164

166

Fish Lake, 164, 206 Fitzwilliam Islands, 104 Flax cultivation, 136 Fort George, 165 Fort William, 103; agriculture, 119; point of departure for the West, 120 Fraser, Cañon, 207 Fraser River joins Thompson, 153; irrigation of Westminster by, 162; at Yellowhead Pass, 164; salmon ascending, 202; baits for angling in, 204, 205; in Cariboo and Lillooet, 206; Harrison tributary of, 207; Stave tributary of, for angling, 219; Coquitlam tributary of, 220; Vedder River, 230; North Thompson tributary of, 232; Steveston canning factory on, 236 Fraser Valley, land reclaimed, French Canadians in 1763, 19: aided Great Britain against United States, 20; conflict with Ontario on education, 21 French River, canoeing on, 80; description of, 83; angling on, 84-88; big game of, 261; trappers, 287 Fruit farming in Norfolk county, 31, 32; at Orangeville, 104; in the Far West, 143

GASPÉ, 19
Geikie Mountains, 164
Geological survey of Canada on gold, 157
Georgian Bay, 93; railway route, 98; steamer route to West, 103, 104
Gibson, Mr. Thomas W., report on Mines, 43, 45
Glaciers in Rocky Mountains, 149, 151
Goat Island bridge at Niagara, 40; hermit on, 41
Goat, Mountain. See Mountain goat

INDEX

Golden and Columbia River, 233 Gold mines, returns on, 158, 159 Gold placer, returns on, 158 Gophers in prairies, 144 Gordon, Rev. Charles W., "Ralph Connor," 126 Gordon, Rev. J. L., 127 Grand Trunk Railway System, route to Algonquin National Park, 50, 58; to Lake of Bays. 90; colonization, 97, 99; through Saskatchewan, 135; prospective line, 163; to Prince Rupert, 163; through Yellowhead Pass, 164; Fort George to Hazelton, 165, 166 Grand Rapids, iron deposits at, Great Britain and Canadian wheat, 140; and Emigration laws, 181 Great Lake trout, description of, 201; trolling for, 233 Greatrex, Mr. Charles, Canadian writer, 284 Grouse, the, species, 248, 249, 250 Gull Island, 117

HALIBURTON, T. C., 284 Halifax, 189 Harrison, Captain James, 286 Harrison Lake, 202, 207 Harrison Mills, 153; steamer to, 207, 208 Harrison River spawning beds, 203; rise of, 207; angling in, 207-218, 220; game birds, 249 Haultain, Professor II. E. T., on Porcupine Gold Mines, 47 Hazelton, 165 Hector, Sir James, and Palliser Expedition, 149 Hector, Mount, 149 Helen Iron Mines, 43; output, 44 Helena Lake, 165 Hiawatha quoted, 101, 217 " Hiawatha," Indian Guide, 208-218 Hochelaga, 21 Holland River, 50 Hollow Lake, 93

Horse breeding, 142, 143
Hotel Dieu, founding of, 17;
relics in, 18
Hudson Bay, 149
Hudson Bay Co., game depletion, 274
Hunchback salmon, species, 198;
description of, 200
Hund Cape and Georgian, 104
Huntsville, steamer trips, 90, 91;
Great Lake trout specimen at, 93
Huron Lake, 43; Jesuits on, 99;
steamer route to Far West, 103;
historic associations of, 105112; joins Superior, 115

Hope River for angling, 207

INTERNATIONAL Fisheries Commission, creation of, 238
Island of Bacchus, 16
Isle Royal, 117

JACKFISH angling centre, 117
James, Mr. C. C., Deputy Minister
of Agriculture, on cost of living,
176

Jasper Lake, 164 Jasper peak, 163 Jesuits, 105-115

KAMLOOPS, wheat cultivation in, 169 joined by Kamloops River. Thompson, 152; at Lytton, Kamloops trout, species, 201 Kananaskas River, 145 Keefer, 207 Keewatin waterworks, 121 Kelso Goldfield centre, 46 Kempenfelt Bay, 51 Kent House, Quebec, 18 Kerr Lake Mine, output, 45 Kettle River, 162 Kicking Horse River, 150 Kindersley, growth of, 143 King, Mr. Mackenzie, Minister of Labour, 177

King salmon, species, 198

King's College, Windsor, Honour conferred on women, 191
Kingsford, Dr., historian, 284
Kootenay, land reclaimed, 170;
Columbia River, 233; big game, 258, 269, 275, 278, 279
Kootenay Lake and steelhead trout, 201, 202; at Lytton, 207; North Thompson River, 232; Great Lake trout in, 233
Kootenay River, 161; salmon in, 202

LABRADOR coast, 7 Lachine Rapids and Moore's Canadian Boat Song, 25 Laggan, 148, 149 Lake of Bays, 90-9 Lake Erie. See Erie Lake Lake Huron. See Huron Lake Lake Nipissing, 27; Champlain on, 80; big game of, 265 Lake of the Woods, water power of, 121 Lake Superior, north shores of, 43; route to the West, 103; rapids of, 115; size of, 116; angling near, 117; toll of life, 118; big game of, 265 Lalemant the Jesuit, 11, 17 La Roche expedition, 12 La Rose mine, 45 Laurentian Hills, 16 Laval College, 22 Leach Island, 116 Lead mines centres, 158, 159 Leisenring, Winifred W., B.A., Leseur art in Hôtel Dieu, 17 Lillooet development, 162; course of Fraser River, 206; big game, 258, 271, 275, 278, 279 Lillooet Lake and Harrison River, 207; trout, 230 Lillooet River, 207; angling, 230 Lumbering effect on forests, 54, 70 Log Abel, 284 Long Point at St. Williams, 39 Long Sault rapids and Champlain, 25

Loyola Ignatius, landing in Quebec, 17; principles of, 109 "Lucky Jim" Mine, 159 Lytton, Fraser River at, 205, 207

MACDONALD College, 23-25, 34 Macdonald Mountains, 152 Macoun, Professor, on Church of Canada, 142 Mackensie basin, 138 Mackensie, Mr. R., on Tariff, 183 Mackensie River and Great Slave Lake, 149 Mackinlay, Darragh Savage Mine output, 45 MacMurchy, Helen, M.D., and Hygiene Congress, Paris, 191 Madawaska River, 52 McGill University, 22-24 McInnes, Dr., 34 McKay, 163 McMallan River, big game, 275 Mallard, The, 248 Manitoba Grain Growers Associaciation and Tariff, 182 Manitoba Province, Confederation in 1870, 123; Returns, 123; schools, 125; progress, 126 "Manitoban," The, 286 Manitou, spirit of, 26, 66 Manatoulin Island, Lake Huron, 104 Marble quarries in British Columbia, 160 Marconi telegraph, 7, 8 Marguerite, romance of, 9-10 Mary Lake, Lake of Bays, 91 Mary River, St., Lake Huron, 115 Mascalonge, The, description of, 81; angling for, 86-87 Matheson, Colonel, 97 Medicine Hat, 25, 143 Methodists, 285 Mining, 43-49, 157-161 Minneapolis, 116 Missanabie River, trout angling in, 117 Mission Tunction, 210 Mond Nickel Company at Sudbury, 43

Montcalm, battle scene of, 16; headquarters of, 18 Montgomery, Quebec, 18 Montmorency, Fall of, 18 Montmorency River, 18 Montreal, steamer trip, 21; progress and institutions, 22-23; hospital, 23; socialism in, 193, Montreal Island in Lake Superior, Moor, Thomas, poet, 25, 287 Mount Royal at Montreal, 21, 23 Mounted police at Regina, 135; organization of, 139 Moose, The, description of, 260-263; haunts of, 263, 264 Moose law, 116; wheat plains of, 135; origin of name, 137 Moose Mountain Iron Mines, description of working, 44 Moose Lake, 165 Moose River, 164 "Montague," The, 286 Mordine Lake, 149 Morinville mines, output of, 132 Mountain goat, description and habits, 276-277 Mule deer, description and habits of, 257-259 Mulock, 98 Musgrave, Sir William, record salmon of, 199 Muskoka Lake, 51 Muskoka River, 52; rapids of, 59; canoeing on, 65-67; angling on, 68-70 NAAS River, valley products, 165 Nanaimo, steamer service to, 154 Narrows, Vancouver, angling in, 220-224 National Council of Agriculture

Newfoundland Fishery, 8 New York Horse Show and Calgary champion hackney, 142 New Zealand market for Canada, Niagara Falls, 18; and Lake Erie, 39; description of, 40; romance and tragedy of, 41: water power, 41-43 Nicoll, Sir W. Robertson, on Canadian writers, 284 Nicola Valley, 162 Ninigon Bay, 117 Nipigon River, trout angling, 117 Nipissing Lake and Champlain, 27, 80; big game, 265 Nipissing Mine, output, 45 Norfolk County, agriculture of, 31; fruit growing, &c., 32-34 North American Indians, on Saint Lawrence, 13, 22; and Champlain, 25-27; hereditary prince of, 78-79; civilization effects on, 80; guides, 80-89, 117; memories of Hiawatha, 101, 102; and Jesuits, 105; customs of ancient, 105-115; Saltaux names, 144, 260; in British Columbia, 160; Cree names, 255, 257, 258, 260, 265, 272; primitive weapons, 273; loon legend of, 287 North Bay and T. and N. O. Railway, 97, 98 Northern Customs Concentration Mines at Cobalt, 45 North Fork River, 207 North Thompson River at Lytton. North-West Mounted Police, 135, Notre Dame Cathedral, Montreal, 23

OATS, Alberta returns, 141 Official returns, trade, 30; mining, 43-49, 157-161; agriculture, 136, 141; Imports and Exports,

des

Victoires

Dame

Church, Quebec, 16

Notre

on Tariff, 181, 183

Halifax, 189 Neklipium Creek, 207

New Brunswick, 244

National Council of Women at

Nelson Mines, lead and copper

172-176; on Tariff, 183-184; fisheries, 235, 240, 241 Olibwa Indians, 77, 80, 101 Okanagan, 162; wheat of, 169; game birds, 249; big game, 255, 274 Okanagan Lakes, steelhead trout in, 201, 202 Okanagan River, angling centre, 211 Oncorhynchus tschawvischa, salmon. 198 Ontario Government, and water power, 42; and "Wild Catting," 48, 49; and National Parks, 50; and conservation of National Utilities, 54; and wolf destruction reward, 72; nationalization of railway, 07, 98; fish re-stocking, 243 Ontario Lake, 30; and River, 39; decline of fish in, Ontario, New, 97-102 Ontario Province, fruit growing, 32, 33; poultry, &c., 34; mining in, 43-49; travel in, 50-121; farmers on tariff, 181; decline in fisheries, 240-245 Ontario Women's Institute, 189 Orangeville, agriculture, 104 Oregon and King Salmon, 198 Oregon rough grouse, 249 Osborn deer. See Caribou Osovoos Lake, game birds of, 250 Ottawa, 5; government at, 28, 29; Imports and Exports of, 29; trade and enterprise, 29; commerce, art and literary centre, 29; Socialism in, 193; big game of, 265 Ottawa River, Champlain explores, 25, 27 Otter Cove, 117 Owen Sound and C.P.R., 103 PACIFIC Ocean, 149, 153; salmon angling in, 220-225

Palliser expedition, 149

Pan-American Exhibition, hacknev champion, 142 Paris Hygiene Congress and Miss H. MacMurchy, M.D., 191 Parker, Sir Gilbert, novelist, 285 Parkman, Francis, historian, 284 Parry Sound and Lake of Bays. 90 Partridges, 248; Europeanspecies, 250; Californian, 251 Peace River and Mackenzie Basin, 138, latitude of, 162 Perks, Dr. W. A., on Porcupine gold mines, 46 Petroleum, in Kootenav and Vancouver, 160 Pheasants, 248; paucity of, 250; in Vancouver Island, 251 Picardy, Sieur de Roberval of, 9 Pickerel, Landing, 75
Pickerel River and French River, 80, 90 Pigeon Bay and Lake Superior, 117 Pike angling in Lake Erie, 38 Place du Marché in Ouebec, 16 Platinium and alluvial soil, 150 Porcupine, habits, 88: invades camp, 89 Porcupine goldfields, centre of, 46 : expert opinion on, 47-49 Portage le Prairie, agricultural market, 134 Portland cement at Vancouver, Port Vermillion and heat wave, Poultry farming in Ontario, 33, 34 Prairies, stories of, 71; features of, 134; productiveness, 136; to Calgary, 143; loneliness of, 144; fire of, 146; flood of, 153, 154, 163 Prairie chickens, 144; species, 250 Prairie Creek, 163 Pratt, Mr. A. C., and angling, 34; in Norfolk County, 97 Presbyterians, Canadian, and Church Union, 285

Press Club, Canadian, 191
Prince Edward County and fruit
culture, 33
Prince Rupert and G.T.R., 163;
proposed railway route, 165,
166
Provincial Bureau of Mines,
report on Porcupine goldfields,
46
Provincial Seed Fair, Albert
agricultural awards, 141
Ptarmigan, willow, 249; rock,
249; white tail, 249, 250
Puget Sound Fisheries, Mr. Badcock on, 237

QUAIL, 220, 248; Californian, 251; Bob White, 251 Qu'appelle River, farming, 136 Quebec, and Champlain, 12, 16; situation of, 15, 16; churches and hospitals, 17; historic places, 18; early settlers, 18-19; French element, 19; loyal British subjects, 19, 20; government and schools, 20-21; life and customs, 30; farmers and tariff, 181 Quesnel Lake, trout in, 202, 232; and Columbia River, 233 Quinnat salmon, Californian name of, 198 Quirpon, Isle of, 8

RAINBOW Mountains, 165
"Ralf Connor," visit to, 126; novels of, 285
Raven Lake, angling on, 94-97
Recollets of St. Charles, befriends outcast missionaries, 18
Recreation grounds in Montreal, 23
Red-head polished duck, 248
Redpath Museum and Library at Montreal, 22
Red River at Winnipeg, 126
Regins, wheat plains of, 135
Returns, official. See Official Returns

Richardson grouse, distribution of, 249 Rideau River, for trout, 117 Rimouski, 8 Roberts, Charles G. W., poet, 284 Roberval, Sieur de, expedition of. Robson Mountains, premier of the Rockies, 165 Roche Miette and Suette, 164 Rocky Mountains, 25, 71, 127, 137; details of, 147-153, 156, 157, 163, 164; big game of, 257, 265, 269, 274-276 Rods and tackle for bass, 36-38; trout trolling, 55-58; flies, 69-70, 232; salmon rods, 206; spoons and minnows, 219, 223;

salmon flies, 222
Rossland Copper Mines, 159
Royal Commission on Technical
Education and Women Appointments, 190
"Royal George," the, 286
Royal Horticultural Society Gold

Medal for fruit growing in British Columbia, 171 Royal Victoria Hospital, Montreal, 23 Royal Victoria University, Montreal, 22 Rundle Mountains, 148 Rutherford, Mark, 58-74

Ruskin, town of, 219 Russell, T. A., on tariff, 186 Russian Jews and Socialism, 194

SAANICH Inlet, 160
Saint Joseph's Island, 115
Salmon angling, in Harrison
River, 207-218; various, Vancouver, 220-224; rivers for,
219-227

Salmon, spring, 86, 87; species of, 198-200; distribution and habits of, 202-204
Salmon River, 207

Salmon River, 207
"Sam Slick." See Haliburton,
T. C.

San Francisco, steamers to, 154 Saskatchewan, 127, 135-137 Saskatchewan River, 136; tributaries of, 138; and Indians of, 139; plains of, 139, 149; and C.P.R. route, 143 Saskatoon, growth of schools and colleges, 143 Sault St. Marie, mines output, 44; industries of, 115; and Soo Pacific Railway, 116 Scallion, J. W., on tariff, 182 Schoolcraft, Mr., on Hiawatha poem, 101 Scotchman's Bonnet, Lake of Bays, 90 Scotch settlers, early, 19 Seton Lake, 207 Selkirk Mountains, 54; glaciers of, 151; big game of, 265 Selwyn Mountains, 165 Seymour Creek, trout of, 222; angling in, 228 Shaw, Mr. C. O., 92 Sherward, Lieut.-Col. A. P., 5 Sheep farming in Alberta, 142 Sheep, Bighorn, the, description and habits, 274, 276; saddle back, 275; Yukon, 275 Shusways Lake, 202; trout in, Sidenham River, 104 Simcoe Lake, 51 Simulkameen, 162 Skeena River, salmon and trout of, 202, 233; big game of, 271 Skeena Valley, fruit growing in, 165 Skuppa Creek, 207 Slave Lake and Mackenzie River. Sleeping Grant Mountain, 110 Slocan silver, 158 Smith, Mr. E. D., on fruit growing in Ontario, 32 Smith, Goldwin, 284 Snipe, the, distribution of, 248 Social Democratic Party Toronto, 194 Socialism in Canada, 192-196

Sockeve salmon, species of, 198; description, 190-200 Soo Pacific Railway, 116 Spallumcheen wheat cultivation, 169 Speckled trout in Muskoka river, 68 Spring salmon, species, 198-199; in Pacific, 222 Standard," St. Johns, the, on "Standard, tariff, 185 Stave, Lake, 219 Stave, River, 219, 220 Steelhead trout, species, 201; distribution of, 233 Stella, art of, 17 Stephen, Mount, 149 Ste. Anne de Bellevue, 23; rapids of, 25 St. James Cathedral, Montreal, St. Lawrence River, mouth of, 10; rapids of, 11; frost bound, 12, 13; Quebec on, 15; distant view of, 16; Fall of Montmorency on, 18; steamer on, 21; world's granary of, 22; at St. Anne's, 23; Lachine, rapids of, 25; return on, 286, 287 St. Louis' Gate, Quebec, 16 St. Mary's College, Quebec, 22 St. Williams, Lake Erie, 35 Stikine river, big game, 265, 271 Stone quarries, British Columbia, 159, 160 Stowe-Gullen, Augusta, appointed to Toronto Senate, 191 Strathcona, Lord, on emigration regulations, 180 Sudbury, nickel and copper, 43; mining industry, 75 Suffragists, 2, 5, 190-191 Superior, See Lake Lake. Superior Swift current, 143 TARIFF and Reciprocity, Deputation to Sir Wilfrid Laurier,

181-187

Teal, the species of, 248 Telegraph Creek, big game of, 263, 264 Temagami, route of, and Hurons, 99; angling in, 100; big game of, 254 Temeskaming and Northern Ontario Railway, 97 Temeskaming Mine, output of, 45 Tennyson's "Sea Dreams," vision of, 122 Teslin Lake, big game of, 275 Tête Jaune and Fort George, 165 Texada Island, limestone of, 160 Thompson, River, and Kamloops, 152, 162, 169; salmon, 202 Three Sister Peaks, Rocky Mountains, 148 Thunder Bay, 117, 119 Tisdale gold district, 48 Tobacco crop in British Columbia, Toronto growth and trade, 29; commercial aggressiveness, 30, 31; electric cars and Niagara, 41; terminus of T. and N. O. railway, 97, 101, 104, 191, 196 Toronto Globe, the, on Tariff, 185; and women's suffrage, 190 Trade returns, Ottawa, 29; Toronto, 29, 30; the Dominion, 172-173; implements, etc., 183-184. See also Official Returns Trek wagon and boy scouts, 3 Trout, common, 201 Trout angling in Algonquin Park, 55-70; Lake of Bays, 90-97; in Temagami, 100-101; reports and criticism on, 239-245 Tupper Mountains, 152

United Church of Canada, 285 United States and annexation, 19; visit to, 40; playground of, 65; tourists of, 71; market for Canadian wheat, 140; trade returns of, 173; and emigration

Tyee salmon species, 198

to, regulations, 179; salmon in British Columbia, 235-239; awards of, 286

"VALKYRIE" III., 286
Valley of Ten Peaks, 149
Vancouver Transcontinental steamer, 153; incorporation of, 154; socialists in city of, 192-193; restaurants of, 178; angling in Narrows of, 220-225, 244

Vancouver island and rivers, 149; resources of, 166; and Cowitchen, 277; game birds of, 251; big game of, 257, 272, 273 Vedder River, 230; angling in,

231-232
Vermillion, Port, 139
Vernon, game birds of, 250
Victoria, 166; horticulture in, 169; game birds of, 251; museum specimen of salmon, 199
Virginian deer, description of, and habits, 259-260
"Volturna," the, 286

WALBAUM, the naturalist, on spring salmon, 198 Wanikewin "Hotel," " House on the Rock," 76; camping centre, 77 Wapiti, the description and habits of, 255-257 Wapiti mountains, 150 Water power of Niagara, 41, 42; Lake in the woods, 121 "Wawa" Hotel, Lake of Bays, 92 Wellington, 166 Westminster, British Columbia, and Fraser river, 153, 205; fertile soil of, 162; and Coquitlam river, 220 Wheat returus, 140, 141 Whipoorwill, the notes of, 80 Whiskey Falls, Moskoka River, Whitney gold centre, 48

Whomack, 219 Widdefried, 98 Widgeon, the varieties of, 248 Wilberforce and iron mines, 44 William, Fort. See Fort William Williams, Saint, on Lake Erie, 35 Wilmott, J. H., on overfishing, 240-241 Windermere and Columbia River, Windsor and water power, 41 Winnipeg, 25, 120, 121; government commodities, 126; seat of, 123; suburban life of, 124; writer and preacher, 127; route to Prairies, 134, 144; restaurants of, 178; socialists of, 194 Wolfe, General, 16, 18 Wolf, the, rush through forest, 71; and deer, 72; reward for, 72; habits of, 72; cunning and treachery of, 73; description of, 74; Congar species, 279

Woodlands, 98
Women's Canadian Historical
Society, 191
Women's Christian Temperance
Union, 189; of Manitoba, 190
Women's Household Economic
Association, 191
Women's National Council, 191
Women's Suffrage, 2, 5, 190
World's Columbian Exhibition
wheat award in British
Columbia, 141

XAVITZ, Professor, 34

YALE, 153, 161
Yale copper mines, 159
Yellow Head Pass, 163-166
Yellowstone Park, big game in,
272
Young, Rev. Edward S., 92-93

ZINC mines, 159



... e .

•

.

•

.

BRENTANO'S Hooksellers & Stationers New York



A25563